

AMID GREATER APPRECIATION OF THE IMPACT OF CHILDHOOD HEALTH AND DEVELOPMENT ON THE LONG-TERM TRAJECTORY OF INDIVIDUALS, THE SCHOOL'S FACULTY, STUDENTS AND ALUMNI ARE WORKING TOGETHER ACROSS DISCIPLINES TO PROMOTE A NEW, MORE HOLISTIC APPROACH.



raising the bar
for **children's**

Growing Emphasis on Optimizing Their Well Being

The long reach of children's health –

Children represent our nation's future – they will create the families, power the workforce, and make American democracy work in the years ahead.

Their health today, important in its own right, also will have a profound effect on their health as adults.

from *Children's Health, the Nation's Wealth: Assessing and Improving Child Health*.
Committee on Evaluation of Children's Health,
National Research Council, 2004.

a notion built on mounting evidence that physical, cognitive and behavioral factors in early life influence outcomes decades later – suggests that there are few better investments for a society than in the health of its youngest members. And yet, despite significant strides in the last half-century – infant mortality and morbidity from infectious diseases and accidents are down, children's access to health care is up – there are worrisome trends and daunting challenges ahead. In the United States, childhood obesity is at historic levels, with a related rise in diabetes. Asthma and autism are increasing for reasons that aren't entirely clear. One in 10 children has a significant mental health impairment.

Moreover, there is a sense that children haven't been well served by a health care system geared toward treating disease. "There is what amounts to a revolution under way in our understanding of what children's health is about and what it means for the long-term health of the nation," says Dr. Neal Halfon, professor in the UCLA School of Public Health and director of the school's Center for Healthier Children, Families and Communities. "When it comes to our children,



health

we need to shift from a system that emphasizes only preventing disabilities toward one that optimizes development and health. And we need to view health expenditures on children as long-term investments in their health capital.”

As a member of the Committee on Evaluation of Children’s Health of the National Research Council and Institute of Medicine, Halfon helped to draft *Children’s Health, the Nation’s Wealth*, a federally funded report requested by Congress. The report, released last October, suggests a new framework for measuring the health of children and provides a foundation for moving toward the type of life-course health development model that Halfon and others have advocated in recent years. “We’re viewing health as a dynamic process that develops over time,” Halfon explains. “It’s the idea that birth weight can influence cardiovascular disease risk decades later, that prenatal nutrition is associated with later-life diabetes and hypertension, that mental health problems can be traced to early childhood, and that many of the disparities that we now recognize in populations of older adults probably have their origins early in life.”

Some of the most dramatic recent evidence of the importance of early interventions on a child’s

life-course trajectory comes from studies showing the impact of a young child’s emotional, physical and intellectual environment on brain development. “We now know that there are certain critical periods in a child’s life that have important implications for future functioning,” says Halfon. For example, he notes, researchers have found that children who spend their first three years in rich language environments enter their school years with four times the vocabulary of children who spend those years in poor language environments. “As a result,” Halfon observes, “the child with the higher vocabulary is much more likely to succeed in school, which makes him more likely to succeed later in life.”

In 1998, California voters responded to this emerging body of research by passing Proposition 10, which instituted a tax on cigarettes and other tobacco products to establish the California Children and Families Commission (“First 5”), which has created 58 county-based early childhood programs that integrate health care, child care, parent education and intervention programs for families at risk. The Center for Healthier Children, Families and Communities has helped to evaluate First 5 at the state level and has consulted with programs in Ventura and Orange counties, as well as assisting in the planning for a federal initiative to improve early childhood systems at the state level. With early

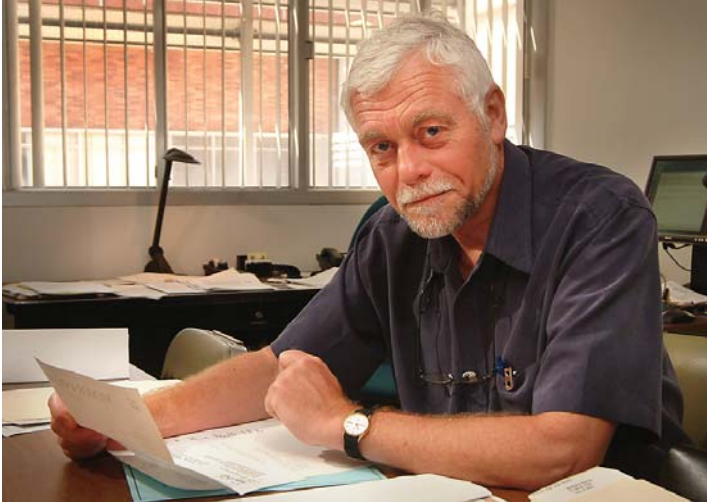


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childhood systems-building becoming a “growth industry” in public health, the center now employs several of the school’s alumni who are leading the teams that are working with various county, state and national early childhood health initiatives.

At the federal level, an ambitious effort to understand the effects of environmental influences on the health and development of children in the United States is being planned. The Children’s Health Act of 2000 authorized a consortium of federal agencies to conduct the National Children’s Study, which is expected to follow more than 100,000 children – including more than 8,000 in Southern California – from before birth until age 21. Researchers at UCLA and other institutions will have the opportunity to study the impact and interaction of the environment, genetics, social factors and cultural influences, among others, in an effort to inform future interventions to improve children’s health.

The largest ongoing children’s cohort study is in Denmark and was founded by Dr. Jørn Olsen, who recently moved to UCLA to become chair of the School of Public Health’s Department of Epidemiology. The Danish National Birth Cohort Study, which Olsen continues to head, is following 100,000 children from fetal life into adulthood; the oldest children in the study are now 8. The focus is on finding early determinants for the most common childhood health problems, including obesity, asthma and other allergic diseases, and for behavioral condi-

tions such as attention deficit hyperactivity disorder.

“We’re following the trend in modern epidemiology to look at health from the life-course perspective, with the idea that some chronic diseases that occur later in life have an origin that can be traced to early childhood and even to fetal life,” Olsen explains. By continuing to follow this large cohort for decades, he adds, researchers might eventually be able to better understand associations between fetal exposures and later risks for cardiovascular disease, certain cancers, and mental disorders.

Olsen, who has been consulted in the planning of the U.S. National Children’s Study, hopes also to establish collaborations with UCLA faculty on research that uses data from the Denmark study. One potentially important resource stemming from the Denmark cohort is a bio-bank built on blood samples taken from women twice during pregnancy, from the umbilical cord blood at delivery, and from the child at various ages. “There is much more that could be explored from this bio-bank than we could possibly follow up on ourselves, and UCLA has excellent facilities for studying gene-environment interactions,” Olsen says. “I’m hoping to engage faculty at the school and in other parts of the university to take advantage of this valuable resource.”

The rise in childhood asthma has been particularly vexing for researchers. “Much of the medical literature has focused on the role of genetics and environmental pollutants or aero-allergens,” says Dr. Alex Ortega, associate professor at the school. “But the evidence on genetics has been weak, and



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although the environment clearly plays a role, it doesn't fully explain why there are significant disparities among populations living in the same neighborhoods."

Ortega is particularly interested in disparities among children in three minority populations with similar forms of social disadvantage: Mexican Americans, who have asthma rates of 4-5 percent; African Americans, with rates of approximately 10 percent; and Puerto Ricans, whose asthma rates have been found to be as high as 18-20 percent on the mainland and upwards of 30 percent for those living in Puerto Rico. "Why is it that some kids are protected and some aren't when they live in similar environments?" Ortega asks.

The answer, in part, could lie in the co-occurrence of asthma and mental health problems, Ortega suspects. He has begun a study examining how psychiatric disorders are a potential risk factor for asthma in children – and also whether such conditions, particularly anxiety disorder, are being mislabeled as asthma. "It appears that a large number of children who have panic attacks are being mismanaged – perhaps they should be on psychotropic drugs, not asthma medication," Ortega says. In other work, he has found that a culturally defined Latino syndrome, *ataque de nervios* – triggered by acute stress and characterized by uncontrollable shouting and crying, trembling, palpitations and aggressiveness – is also closely associated with asthma attacks; Ortega is following up to determine the explanation for this association. He also recently found that the frequency of mental health problems in a parent is associated with a greater likelihood that the parent's child will have asthma or asthma attacks.

A diagnostic bias in the health care system might also contribute to the discrepancy, Ortega suspects. His research has suggested that the higher prevalence of psychiatric disorders such as anxiety and depression among Puerto Rican children and adults might be partially attributable to differences in expressive styles, with cultural factors making Puerto Ricans more likely to respond to stressful situations in a way that leads to these diagnoses. In studies focusing on

Kathryn Smith, R.N., M.N.

Smith, a doctoral student in the Department of Health Services who is supported by the school's Child and Family Health Leadership Training Program, recently directed the California Medical Home Project, a statewide, seven-site project aimed at increasing access to comprehensive services for children with special needs through the promotion of the medical home concept. This concept envisions the pediatric practice as a family-centered, community-based, accessible, and culturally effective coordination center for services. "Children who have special health care needs due to chronic medical conditions have more difficulty obtaining health care than other children," Smith explains. "The problem is particularly acute in California because of low payment rates to primary care physicians, a fragmented delivery system, and cultural and language diversity." A statewide coalition was formed to address state policy and administrative barriers. Then, seven local coalitions received 18 months of funding to plan and implement community-based improvements, engaging key stakeholders in their work. Third, a program office was established at Children's Hospital Los Angeles to provide technical assistance to the local coalitions and convene them periodically to exchange knowledge. The project succeeded in improving access to care, improving the quality of care in participating medical homes, and engaging parents as partners in the care of their children with special needs.

Kimberly Uyeda, M.D., M.P.H. '01

The challenges in educating students of a large, urban school district are many, but to Uyeda, director of student medical services for the Los Angeles Unified School District, faculty member of the UCLA Center for Healthier Children, Families and Communities and former leadership trainee of the school's Child and Family Health Program, none is as fundamental as the general deficiencies in the health of a significant number of the district's students. "We all know healthy kids are better learners, but how do we raise test scores when there are still students who come to school with contagious disease, inadequately clothed and fed, and suffering from both physical and mental health problems?" Uyeda asks. Addressing these basic health care needs is a tall order when more than 80 percent of the student population comes from lower-income families, many speak a language other than English at home, and the uninsured rate hovers around 18 percent for school-aged children in Los Angeles. Innovative health initiatives have sprung from the school setting in LAUSD, including express enrollment into health insurance through the information provided on the school lunch application; school-based clinics; and bans on soda and junk food during school hours.

Raphael Travis, Jr., M.S.W.

A former practicing clinical social worker, Travis was recruited to the school's doctoral program in 2000 as a Child and Family Health Program leadership trainee, and is currently a doctoral candidate in the Department of Community Health Sciences. For 2004-05, he is a pre-doctoral fellow with the Association of Schools of Public Health and the Centers for Disease Control and Prevention, as well as a fellow with the National Consortium on Violence Research. He is also a staff research associate at the UCLA/RAND Center for Adolescent Health Promotion. Travis worked to integrate principles of positive youth development into his social work practice as a clinician in therapeutic behavioral health settings for adolescents in Maryland. His research interests include long-term investment in adolescent health and the cultural implications of positive youth development approaches to community services. He is exploring methods of creating a unified system of youth development and community-building strategies within localities to promote optimal adolescent and family health, particularly in communities of color. "I hope to become a leader who contributes to shaping the regional and national agenda on adolescent and family health with an emphasis on long-term developmental health and social justice," he says.

Ramesh Raghavan, M.D., Ph.D. '03

While a fellow at UCLA's Pediatric Pain Program, Raghavan worked on the first meta-analysis of bio-behavioral interventions for pediatric headache. The study marked a turning point.

"This was when I finally made the shift from a patient-focused clinician to a population-focused policy work," Raghavan quips. "I realized that research that leads to policy change has the potential to affect the care of numerous children simultaneously – in contrast to changing things one child at a time, in the way most clinicians are accustomed to thinking about their work."

At the UCLA/RAND Center for Adolescent Health Promotion, he spent three years working on a variety of projects, and was awarded a dissertation grant from the Agency for Healthcare Research and Quality to support his Ph.D. dissertation on health policies that affect the use of ambulatory mental health services for children in the child welfare system.

As policy director for the National Center for Child Traumatic Stress, a joint center between UCLA and Duke University, Raghavan currently works with 54 centers nationwide in promoting access to services and raising the standard of care for traumatized children through policy analyses, policy development, and advocacy. "Children exposed to trauma are poorly served by our silo-driven organization of mental health services," Raghavan says. "It's enormously rewarding to work to effect change for such a vulnerable population."



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Puerto Rican children in New England and on the island of Puerto Rico, Ortega is looking at differences in symptom perceptions and expressive styles and seeking to determine whether these differences influence treatment.

"The symptoms of a panic attack are very similar to the symptoms of an asthma attack, and it's possible that pediatricians are misdiagnosing panic attacks as asthma because they associate asthma, and not mental disorders, with children," Ortega notes. "This is particularly problematic for minority children, who are much more likely to be exposed to social stressors, and who doctors are more likely to associate with asthma risk."

Elsewhere at the school, Dr. Mark Schuster, professor of pediatrics and health services and founding director of the UCLA/RAND Center for Adolescent Health Promotion, is leading the Los Angeles site of "Healthy Passages," a Centers for Disease Control and Prevention-funded study seeking to identify the causes of a wide variety of children's health outcomes and health-related behaviors. More than 5,000 youths in Los Angeles, Houston and Birmingham, Ala., will be followed between the ages of 10 and 20 through interviews with the child and a parent and data from their schools and the communities in which they live; topics of interest include substance use, violence, injuries, physical activity, nutrition, physical and mental health, and sexual behaviors.

Schuster, who co-authored *Everything You Never Wanted Your Kids to Know About Sex, but Were Afraid They'd Ask* (Crown Publishing Group, 2003), is also leading a project funded by the National Institutes of Health to develop and evaluate a program, "Talking Parents, Healthy Teens." The program aims to help parents improve communication with their adolescents, promote healthy adolescent sexual development, and reduce adolescent sexual risk behaviors. The program is unusual both because it is offered in worksites – an effort to reach a large number of parents easily – and for its focus on parents rather than adolescents. "We felt that if we could teach parents the skills needed to open up their relationship with their kids, we could have a longer-lasting impact," Schuster says. In eight weekly lunch-hour sessions at worksites, parents learn communica-

Debra Lotstein,
M.D., M.P.H. '05

As a resident in internal medicine and pediatrics, Lotstein became aware of the problems in the health and health care of young adults with chronic childhood conditions such as sickle cell disease, cystic fibrosis, spina bifida and congenital heart disease. “I noticed a gap that occurred as children with these conditions transitioned into adulthood,” she says. “There were interruptions in their care as they were often unable to connect with appropriate adult-oriented providers. Some of them seemed to not have developed into adulthood in terms of work and social development.” Her public health education helped her to think about how she might further study this population. In partnership with the California Children’s Services (CCS) agency of San Bernardino County, Lotstein has concluded data collection and is analyzing results of a telephone survey of young adults with serious chronic medical conditions, looking at the assistance they received transitioning into adulthood and their adult health and related outcomes, as well as their access to the health care system. The project has informed Lotstein’s work as an assistant professor of pediatrics at UCLA and a researcher at RAND. She is now developing transition preparation programs for young adults with chronic conditions at UCLA, and planning future studies to look at ways of improving the transition practices of the CCS program statewide.

tion skills, practice role plays, and take part in peer discussions. The program’s impact is currently being assessed in a randomized controlled trial.

Although teen pregnancy rates have declined in recent years, the prevalence of U.S. adolescents engaging in sexual activity – more than 60 percent of students have had intercourse by the time they finish high school and many are not using contraception, surveys indicate – continues to warrant serious concern about unintended pregnancies, sexually transmitted diseases and the emotional health of teens who experience sex before they’re ready, Schuster says. “Most parents are eager to share their values with their kids and to discuss issues related to sexual health, but they don’t know how,” he explains. “We help parents learn practical strategies for talking with their kids about sensitive topics, getting involved in their lives, providing appropriate supervision, and taking other steps to promote their kids’ health. We’re finding that the program makes a real difference.” Schuster is also studying the effect of California’s new paid family leave law – the first such law in the nation – on parents of children with special health care needs, who may have a particular need to take time off from work.

For California’s children with special health care needs, a fragmented service system adds to the burden. “There are multiple funding sources for their care, none of which tends to be very proactive or family-centered,” says Dr. Moira Inkelas, assistant



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IN CALIFORNIA:

Only half of children in families with incomes below 100% of the federal poverty level are described by their parents as being in excellent health, vs. more than 80% of children with family incomes above 200% of the federal poverty level.

The proportion of Latino children reported to be in excellent or very good health (59.3%) is lower than for all other race/ethnic groups.

About 202,000 children under the age of 6 are uninsured, representing 6.8% of the state’s young children.

More than one-fifth of young children diagnosed with asthma had an asthma-related emergency room visit during the year. The rate was 33.7% for children ages 1-2.

In California households with incomes below the federal poverty level, approximately 46% of children age 5 and 25% of children age 2 drink soda daily.

Fewer than half of parents (43%) read to their child daily.

Only 12.6% of Latino children ages 3-5 are enrolled in preschool, vs. 36% of African American, 32.1% of American Indian/Alaska Native, 28.9% of non-Hispanic white children and 23.4% of Asian children.

Source: *The Health of Young Children in California: Findings from the 2001 California Health Interview Survey*, by Moira Inkelas, Neal Halfon, Kim Uyeda, Greg Stevens, Janel Wright, Sue Holtby, and E. Richard Brown. For more on the California Health Interview Survey, based in the UCLA School of Public Health’s Center for Health Policy Research, see page 6.

Rita Maldonado

As an M.P.H. student in the Department of Community Health Sciences, Maldonado has learned about program planning and research; in her work as a graduate student researcher at the UCLA/RAND Center for Adolescent Health Promotion, she has seen these concepts in action. Maldonado has participated most extensively in three of the center's studies: "Talking Parents, Healthy Teens," in which she has participated in the implementation and in data collection of research on an intervention to improve parents' communication with their children on sexual matters; "Families Learning Together," a school-based parent-adolescent communication program on sex and HIV, in which Maldonado was involved in the development of the intervention and the survey materials, and with recruitment, implementation and data collection; and the Children with HIV-Infected Parents Study, where she has contributed to the data analysis. After completing the M.P.H. program, she hopes to work with communities to create programs that address the needs of people with disabilities. "I believe that to reach the goals of inclusion and full participation that are expressed both nationally and internationally, we must take a population approach," she says. "I look forward to applying what I have learned both at school and at the center toward that end."

"There are multiple funding sources for [California children with special health care needs] care, none of which tends to be very proactive or family-centered."

— Dr. Moira Inkelas (center), pictured with Lisa Schoyer (l.), chief of family support at Los Angeles County Children's Medical Services, and Dr. Kyra Samson, a trainee in the school's Child and Family Health Leadership Program.



professor at the school. "As a result, parents and providers are often confused about the care for which the child is eligible, and referrals are often incorrect or not made in a timely fashion. Families are forced to try to figure out where they can get various kinds of services, and with multiple agencies involved and resources constrained, they're put in a position of fighting to prove that they're eligible."

Inkelas and colleagues recently evaluated a project for the California HealthCare Foundation designed to improve health care for these children, with a particular focus on the nearly 175,000 who are part of the California Children's Services (CCS) program. CCS pays for specialty health care services for children from birth through age 21 who have serious and often chronic medical conditions such as birth defects, HIV/AIDS, cerebral palsy, heart disease, cancer, and endocrine and metabolic disorders. The California Medical Home Project established a statewide policy coalition and seven county-based coalitions to improve community systems of services for the CCS population. The project produced effective strategies for better coordination and continuity of care.

"There are administrative procedures that can make it very difficult for people to access care," Inkelas notes. A recent partnership between UCLA and the Los Angeles CCS program produced a survey of approximately 2,000 parents of children in the CCS program, focusing on access barriers and satisfaction with the program. Inkelas and colleagues found that while CCS has successfully

reduced financial barriers to care, significant delays in authorization and timeliness of specialty appointments continue to be problems. The survey identified issues of concern involving the transition of young adults, ages 18-21, from the CCS program to adult providers and insurance programs.

Inkelas and colleagues also devised a chartbook describing health care access for California children with chronic illnesses. Building on recently released federal data that defined children with special health care needs and provided national and state information on specialty care access, care coordination, and unmet health care needs, the chartbook provides new data on access to care for these children and compares the care received by California children with special health care needs with that received by special-needs populations in other states. The population-based survey found that California performs well below the national average, ranking among the bottom 10 states on a number of access measures.

"This study provides some of the first data supporting the policy concerns voiced by advocates for special-needs children in the state," Inkelas says. "These are some of the most vulnerable children, and as we learn more about the importance of childhood health and its impact on adult health, we learn about missed opportunities of the health care system to identify concerns in a timely fashion and address them in effective and efficient ways. Public agencies with responsibility for severely affected children need to be more proactive in asking parents what they need and making sure they get the services they are authorized to receive."

Halfon believes that "missed opportunities" is a theme that can be applied broadly when assessing the nation's past efforts in children's health. But he is encouraged by the emerging consensus calling for a reprioritization. "The system hasn't been set up to promote optimal health and development of children," Halfon says. "The majority of the U.S. health care budget goes toward high-tech management of chronic, degenerative, disabling diseases that affect older adults. A small percentage of children have severe disabling conditions, but approximately one in seven has special health care needs, and 30-40 percent function sub-optimally. Most of these kids just slide under the radar until they start having other kinds of problems as they get older. Increasingly, we're realizing that these problems could be prevented if we addressed them earlier."