



Robert Anda: Public Health Researcher

Robert Anda wants everyone to know the key messages in *From Neurons to Neighborhoods: The Science of Early Childhood Development* — and he does mean *everyone*.

As with public health awareness campaigns against smoking, teenage pregnancy, and AIDS, a campaign that promotes public awareness of the links between babies' brain development and early nurturing would go a long way toward protecting the youngest and most vulnerable members of society, he says.

"I have found that people connect with the general idea of protecting the brains of their children," said Anda. "They will protect their children's brains from baseball bats and bicycle accidents and lead. [And now] I think people are beginning to understand, as a result of *Neurons* and other work in the field, that they need to nourish children's brains and protect them from maltreatment and stress in order for their children to be healthy."

Anda recalls the first time he saw *From Neurons to Neighborhoods*, published by the National Research Council and Institute of Medicine in 2000. "I said, 'Wow. This is awesome.' When he included information from it in presenting his own research about adverse childhood experiences, his audiences were captivated. "[In] talking about brain development and toxic stress and neglect, people are just drawn to it. It's something instinctive. It's really a wonderful thing."

Wonderful, Anda says, because interest leads to awareness and awareness is the link to public health. This awareness ties closely to his work as principal investigator of the Adverse Childhood Experiences [ACE] Study, which examines the health and social effects of adverse experiences over people's lifetimes.

Anda speaks to all kinds of groups, most of them multidisciplinary, he says. They are made up of social workers, psychologists, physicians, child protective services employees, law enforcement, judges, policy makers and educators. He's most excited about the educators.

"There are good kids who can't learn because of stressful or neglectful experience, which has affected the way their brains developed," Anda said. "We have all these wonderful children out there in every single classroom in the U.S. who have difficulty doing the work."



"*Neurons* is the crossroads to public health, where so many paths intersect."

Robert Anda, M.D., is a senior researcher in preventive medicine and epidemiology at the Centers for Disease Control and Prevention in Atlanta. He has spent 20 years in the U.S. Public Health Service.

Anda also is excited about the large growth in the number of studies done in the 10 years since *Neurons*, work on child maltreatment and other adverse childhood experiences and how those conditions relate to a vast range of behavior and conditions, including heart disease, premature mortality, lung disease, suicide, and drug abuse. His ACE study has demonstrated that childhood adversity contributes to the 10 most common causes of adult death. “The epidemiology base has grown fairly dramatically and is starting to expand internationally,” he said.

Most important, Anda says, “We’re close to a ‘tipping point.’ There is beginning to be a critical mass of people who ‘get it,’ who understand that if you want to have healthy people you need to have healthy human development, which is healthy brain neurons and brain systems.”

Anda says the epidemiologic information in public health that supports what was stated in *Neurons* in 2000 is now overwhelming.

“One of the recommendations in *Neurons* was that we ought to be taking a look at the science and how to build some sort of public health campaign around it so that people would be aware of the need to nourish and protect the brain and intervene in adverse conditions when appropriate,” Anda said.

“I think it will take a few more years — and I emphasize a few — for national awareness that we can do something. We, collectively, can do something to turn down the volume on stress and maltreatment and adverse conditions so the next generation will inherit something better and then can pass on something even better to the generation after them.”

For More Information

Copies of the report, *From Neurons to Neighborhoods: The Science of Early Childhood Development*, are available for sale from the National Academies Press at (888) 624-8373 or (202) 334-3313 (in the Washington, DC metropolitan area) or via the IOM website <http://www.iom.edu/neuronstoneighborhoods>. Full text of the report and a free pdf copy of the Summary are also available at <http://www.iom.edu/neuronstoneighborhoods>.

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From Neurons to Neighborhoods: The Science of Early Childhood Development is a report from the Board on Children, Youth, and Families in the Institute of Medicine and National Research Council.
www.bocycf.org 202-334-1935

Neurons to Neighborhoods says that the negative effects of stress and the positive experiences that children do not get “are the most important public health issue of our contemporary culture. “There is certainly no doubt in my mind,” Anda said. “The data are all there. The epidemiologic data are there. I think it’s becoming irrefutable.”

The kind of public awareness Anda wants to create will be a multi-generational project, he says, similar to the anti-smoking awareness that took generations to complete. “Who knew in the 1960s that the U.S. Surgeon General’s report on the consequences of smoking would lead, decades later, to cutting smoking in half?”

Anda says the babies and young people now damaged by stress, maltreatment, and other adverse conditions far exceed the number of people who can provide any kind of remedial services or assisted services or enrichment services for them after the damage is done. “There’s not enough money. There are not enough public servants.”

He would like to see an information campaign designed “so people can empower themselves in their own communities and their own families.” Taking these community-based programs to scale requires new approaches for public and private sector collaboration. Which is why, he says, change needs to come on a massive scale.