

# Autism Spectrum gets Groundbreaking Attention at SDSU

## College of Education Offers Innovative Master's Program With a Specialization in Autism.

Professors Laura Hall and Bonnie Kraemer are passionate about their work. Both women teach and conduct research on autism in SDSU's Department of Special Education. And they coordinate a recently created MA program that helps teachers learn how to help students affected by autism.

"At present, treatment is all about early intervention and effective education," says Hall, whose work centers on young children affected by autism and their families. Hall emphasizes that their goal is to provide practical, real-world help. "We're focused on research-to-practice, so that students get our findings out to those populations that can benefit. This is not theoretical but very much applied research."

Kraemer's work involves secondary age youth with autism spectrum disorders and those who are transitioning out of the school system, finding ways to develop their talents and interests into effective life skills as they move toward adulthood.

"We've received generous federal grants to support this work," says Kraemer, "and that supports students working toward the MA in autism educa-



Professors Laura Hall and Bonnie Kraemer

tion." Students have their tuition covered for the duration of the program, in addition to support for books and some professional travel.

The two-year MA program has so far graduated over 100 students. Most have stayed in San Diego and continue to work in schools and agencies that assist persons with autism. Hall and Kraemer are committed to creating a community of support by staying in touch with former students, working actively with families affected by autism, and

reaching out to local agencies, schools, and organizations. "There's a lot of collaboration and community building," says Hall. "It's one of the things we're most proud of."

**SDSU is a national leader in providing programs to train teachers of autistic students.**

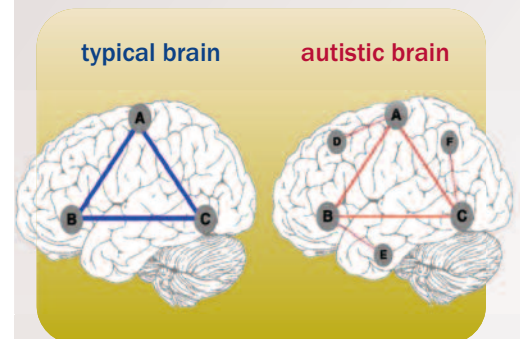
According to Kraemer, the prevalence of autism is on the rise. "The Centers for Disease Control and Prevention estimate that one out of 110 children now lands somewhere on the spectrum."

## Researchers from SDSU's Brain Development Imaging Lab find brain overconnectivity in autism.

Autism affects, among other things, a person's ability to interact and communicate with others. Scientists have long known that the disorder involved neurological abnormalities. In 2004, a theory was proposed that the autistic brain has too few connections. It received broad attention and has been generally accepted, until recently.

Now, two studies from SDSU's Brain Development Imaging Laboratory suggest that brain overconnectivity may actually be the cause.

A study led by SDSU psychology Professor Ralph-Axel Müller surveyed existing studies of functional connectivity. It found they actually show a pattern of results suggesting the autistic brain may be partly overconnected.



A second study from the same SDSU lab, led by Patricia Shih, found that in young people with autism, a brain region in the temporal lobe is more widely connected with other parts of the brain than in typically developing children.

The SDSU studies suggest that certain networks may connect broadly with too many other parts of the brain and therefore do not specialize well.