

Animals & Autism: A Person Improved The Understanding Of Both

BY DR. MIKE ROSMANN

Sponsored By The L&C Behavioral Health Center

Most modern livestock handling facilities and methods that minimize stress and insecurity to large animals owe their implementation to an autistic person, Dr. Temple Grandin. Her recommendations have been implemented by nearly all the major livestock slaughtering plants in the U.S. and by a growing number of livestock producers.

Grandin is a professor of animal science at Colorado State University who has also changed the way society thinks about autism.

Now called autism spectrum disorder, autism is either becoming more common, or more frequently recognized and diagnosed.

Typically, persons diagnosed as autistic exhibit varying intellectual capacities, some of which are deficient and others occasionally spectacular in certain areas, as well as variable communication deficiencies and lower ability to socialize and form relationships with others.

What causes autism has generated much controversy about childhood vaccinations and parenting methods. I won't enter the dispute about the possible effects of vaccinations.

Parenting methods have largely been ruled out as a contributor to autism. I will note though that something affects parts of the brain to develop unusually and for the behaviors governed by these parts to vary from most other people's behaviors.

Are the biological changes in the autistic



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person due an increasingly chemically-altered environment and nutrition? Experts don't know for sure.

The amygdala and inheritance are important. The brain structure known as the amygdala is the chief controller of the fear response, as well as the recognition of emotions in other persons, the meaning of facial expressions and responses to common social behaviors like affection.

Deficiencies in these functions are key features of autism. The amygdala has been identified as a major structure that is different in varying degrees for persons with autistic behaviors.

A heritable component to autism is also fairly certain, for autism appears to be expressed genetically in people because of a proclivity inherited from multiple previous generations, or from mutations in one or both parents' DNA. Gestational abnormalities due to the mother's exposure to something also have been suggested.

It is not fully clear how stress and other environmental conditions such as exposures to toxic substances alter DNA.

Autistic behaviors shouldn't automatically be labeled as disordered. Atypical social behaviors aren't necessarily

dysfunctional.

Dr. Grandin's observations about how to minimize stress on cattle, pigs, sheep and horses came about because autism enabled her to sense how animals feel.

She demonstrated that minimizing noise and using circular sorting pens and winding alleyways with opaque walls which prohibit animals from seeing people hustling about, and other threatening visual stimuli outside or ahead, help the animals to feel calmer.

Forcing excited and insecure animals such as cattle with prodding pokes on their rears to move ahead in straight alleyways worsens their cooperation with handlers to enter loud and unfamiliar headgates in which they witnessed other cattle bellow in fear or pain.

On the other hand, squeeze chutes that can't be seen and which hold animals securely, help them feel safer. Grandin said she also calmed down if she wrapped herself tightly in an invention she called a "hug box" when she felt distraught.

Grandin also taught parents, teachers and therapists how to work with persons exhibiting a degree of autism. Most of her methods aim at reducing stimulation and showing autistic persons what to say and do, while recognizing every autistic person is different.

Some of the greatest contributors to science, such as Albert Einstein, and to literature, like the author of Alice's Adventures in Wonderland, Lewis Carroll, were possibly autistic to some degree. The variations called the autism spectrum disorder can be useful capacities.

To be sure, severe limitations in communication, self-maintenance and near incomplete ability to adapt to social norms can be viewed as disabled behavior. But society needs to develop much more tolerance for differences and understanding of behaviors that may be labeled as disabilities.

Most of us should change our views about what disabled means. My youngest brother Larry helped teach me this.

Larry had a form of Down syndrome and was born with a bowel imperfection that required surgery when he was three days old. He was not autistic, although he had a limited vocabulary, and could not read or write despite participating in special education for 14 years.

Larry had disabilities, but he figured out what was most important in life better than me and most other people. Although he often experienced pain, he never complained, even when he died in 2008 as his organs shut down. His gestures seemed to say "I can do this, you don't have to be afraid or worried."

Larry was almost entirely unselfish. He was one of the kindest and most caring persons I ever knew, and a teacher for me to the end.

Larry was a motivational force for me to study psychology. Dr. Grandin also inspired many people, including me, to better understand animal behavior and autism.

Dr. Rosmann lives on a farm near Harlan, Iowa. He can be contacted at: www.agbehavioralhealth.com.

Applied Engineering Visits Beadle Students

Second-graders at Beadle Elementary are taught science topics ranging from plants and animals to weather and the solar system. In the past few weeks, the students have covered a new chapter about motion including force and magnetism.

We were lucky enough to have William Johnson of Applied Engineering present to our class about how these concepts are used at the facility.

Applied Engineering is a well-known world-class manufacturer of precision machined aluminum components and assemblies for the defense, communication, electronic, and aerospace industries.

William explained to the students just how big of an impact magnets have on our daily lives and how prevalent they are.

He also conducted a few demonstrations for the students showing everything



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from the different strengths of magnets to how you can turn a magnet's force on and off. The presentation helped further the students' understanding of force and mag-

netics. This was a wonderful learning opportunity for our class.

Thank you Applied from Miss Zentmire's second graders!

Local Student Candidate In Presidential Scholars Program

Zach Lattea, a graduating senior at Yankton High School, has been named one of more than 3,900 candidates in the 2015 U.S. Presidential Scholars Program. The candidates were selected from nearly 3.4 million students expected to graduate from U.S. high schools in the year 2015.

Inclusion in the U.S. Presidential Scholars Program, now in its 51st. Year, is one of the highest honors bestowed upon graduating high school seniors. Scholars are selected on the basis of superior academic and artistic achievements, leadership qualities, strong character and involvement in community and school activities.

Over 3,900 candidates were selected for their exceptional performance on either the College Board SAT



Lattea

or the ACT Assessment. In addition, each Chief State School Officer (CSSO) was invited to nominate five male and five fe-

male candidates, based on their outstanding scholarship, residing in the CSSO's jurisdiction. Further consideration is based on students' essays, self-assessments, descriptions of activities, school recommendations, and school transcripts. A distinguished panel of educators will review these submissions and select 560 semifinalists in early April.

The Commission on Presidential Scholars, a group of up to 32 eminent citizens ap-

pointed by the President, will make final selection of the Scholars. They will select one young man and one young woman from each state, the District of Columbia, Puerto Rico, and U.S. students living abroad; 15 students at-large; and up to 20 students from the creative and performing arts. The U.S. Department of Education will announce the Scholars in May.

Scholars will be invited to Washington, DC, for several days in June to receive the Presidential Scholars Medalion at a recognition ceremony and to participate in events and activities. Zach is the son of Tom Lattea, Chris Moore and Eric Moore and can be reached at 605-760-4057.

Indian Museum Of North America Increased Opportunities For Visitors

CRAZY HORSE — In 1948 when Crazy Horse sculptor Korczak Ziolkowski began carving the memorial to the Native American, he established the Indian Museum of North America, which started small and has continued to grow each year.

This summer, the museum is offering increasing opportunities for visitors to the memorial and for native students and artists.

Museum Curator Mary Bordeaux says, "There are several new opportunities available. They include arts scholarships, museum internships, an artist-in-residence program, continuing education funding, a one person show and the summer lecture and performance series.

The Artist-in-Residence program provides six artists a paid, one month opportunity to show and sell their art in the Indian Museum of North America. Artists share their experiences with visitors by demonstrating and interacting. Native American artists from South Dakota, North Dakota, Minnesota and Wisconsin are invited to apply for the Artist-in-Residence program.

Crazy Horse Memorial Foundation's Indian Museum of North America hosts seven varied and funded op-

portunities for students and artists under its Connections and Opportunities Program. Applications are now being accepted for every program at <http://crazyhorsememorial.org/6490/connection-and-opportunities-project/>. For additional information contact museum curator Mary Bordeaux at 605-673-4681 or e-mail her at mary.bordeaux@crazyhorse.org.

The Indian Museum of North America is home to an extraordinary collection of art and artifacts reflecting the diverse histories and cultures of the American Indian people. The museum, designed to complement the

story being told in stone on the mountain, speaks eloquently to present and future generations about American Indian life.

Thank You!

I want to thank everyone for the many birthday phone calls, greetings and cards that were sent to me for my 80th birthday.

Leland Wiedmeier

The Public Is Invited To A Reception Honoring Yankton's 2014 Citizen Of The Year

Ben Hanten



1:30 p.m. Saturday, March 28

Yankton Elks Lodge

A Special Program Begins At 2 p.m.

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This Special Event Brought To You By
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\$9.99 Sweaters & Fleece!
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