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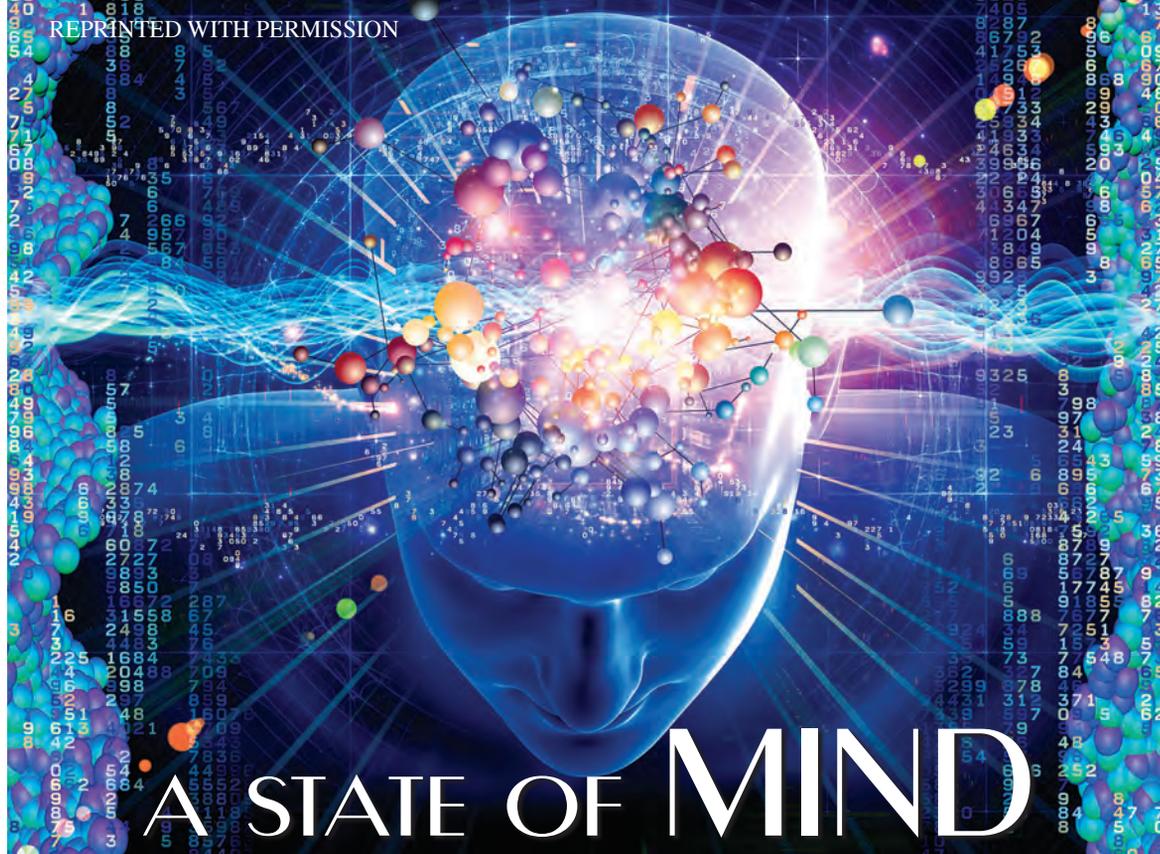
A State of Mind

Since 1980, the Centre for Neuro Skills has been bringing the best in care to those who have suffered from brain injuries in Bakersfield.

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*The Bridge to a Meaningful Recovery*



Since 1980, the Centre for Neuro Skills has been bringing the best in care to those who have suffered from brain injuries in Bakersfield.

By Naomi Moss

**K**eeping up with their ever-evolving field, they may have experienced upgrades in their approach to care and therapy, but their core values for providing treatment in an environment conducive with their patients' typical living situation has stayed the same. Through careful review and constant follow-up, they have made exciting developments that greatly enhance the lives of their patients in Bakersfield as well as those in Los Angeles, San Francisco, and Dallas.

Although they focus on the care and rehabilitation once patients are discharged from a hospital, they also participate in clinical trials and research to better the understanding of brain injuries on not only accident victims, but of stroke and tumor sufferers, as well. With three levels of care (inpatient, day treatment, and outpatient), CNS is able to distinctively treat each patient and see the effects of specific brain trauma up close. Some people need around the clock care while others' injuries are not

so intense. While each case can be new territory and research is done every step of the way, CNS wants to learn about brain trauma and the effects on the body so they can treat patients better over time. Through the specific treatment of close to 100 patients a year in Bakersfield alone, they are in a unique position to further research brain injuries more often than the average hospital.

While most might think the idea of research is confined to hospital gowns and laboratories, that isn't the only way it can be done. CNS takes the philosophy, "Research helps us" quite seriously. **Dr. Lisa Kreber**, Director of Research, explains this concept, "The clinical process helps us in the circle of research." By treating patients, they are able to observe the outcome thereof. For example, an MRI is a standard test when patients arrive at the facility. "Centre for Neuro Skills is able to use the MRI to not only diagnose and specify injuries upon arrival, but also see the relationship of the injury and predict certain cognitive behaviors," said Kreber. >>



“Quest Imaging provides the service for us and they are wonderful.”

The MRI may be standard for treatment, but they also offer patients a chance to participate in special cognitive testing on arrival. “This is for traumatic brain injuries, not strokes or tumors. With permission, we test patients’ cognitive abilities, depression, and other things.” Then they compare test results with the MRI. “If all patients have a

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bad portion of the testing, then we can look and see if it’s a pattern in the MRI.”

This MRI/cognitive testing is partnered with the University of Texas Southwestern Medical Center, but it is not the only one. Kreber details, “We are finding that seventy percent of patients we get have some hormone deficiency.” As

a result, patients are now tested in the hospital before they arrive. The hormone study gives CNS a better understanding of what is going on inside a patient and how that brain trauma affected his/her body. “We do a full hormone panel that tests thyroid, reproductive, and growth hormone levels in patients.” With some brain injuries, the pituitary gland and/or other organs may be affected and result in low or lacking hormones in patients. Vice President **John Schultz** adds, “When hormone levels are out of whack, it can lead into other areas.” For example, a lack of growth hormones in a young child due to a traumatic brain injury could have dire consequences later in life.

The hormone study is a one year commitment from patients. Participants take the hormone or placebo for six months, and then stop. In another six months, they do a follow up with the same tests. While treating the patient, cognitive functions are monitored through basic cognitive testing before, during, and after the six months of treatment. This particular study is a double blind study, where the researchers and patients do not know who has the hormone

and who does not. Kreber shares, “This allows me to test and treat all patients equally. I won’t have a biased opinion when they aren’t performing well. It’s exciting to see the results in the end, although sometimes it can be frustrating [not knowing].”

Through all research Kreber cautions, “We have a clinical protocol on every patient.” Thus, they can see what happens when one person is treated and another is not. The centre also goes through rigorous approval on research of patients. Not only does the University of Texas Southwestern Medical have to approve the study, the centre also has a review board go over patient liability to ensure they are treated ethically. They have to renew the study approval each year

universities unnecessary. Since their patients are a very specific group, current students of psychology or allied health fields sometimes inquire about studying them for their own educational purposes.

**Patricia Wright**, who is working toward her doctorate in clinical psychology, asked CNS to help her understand the effects of coping with brain injuries. “When the frontal lobe is damaged, a patient can look and act fine physically, but their personality can be changed.” Wright’s research tests not only the patients’ idea of how they are coping with a brain injury, but will ask the same questions of family members to get a clear picture of what is really going on. “Sometimes the patient will say, ‘Yes! I’m doing great!’



and sometimes things change along the way.

The centre has been conducting research for years, but it doesn’t all stay within their facilities. They have partnered with different groups for the edification of the industry, as a whole. Past partnerships have included UCLA, Southern Illinois University, and individual student research. CNS often conducts sleep studies, making the use of several larger

and the family says, ‘No! He’s crying all the time.’ We call it Impaired Awareness: patients are unaware of how they have changed.” Such patients are not able to accurately assess themselves psychologically.

Wright’s motivation toward cognitive research is due to the fact that these can be lifelong injuries. Anger, insensitivity, or extreme depression can be permanent side effects to a brain trauma. “I found there is a



gap in how to treat patients once rehabilitation is done.” The damage is not physical, but emotional. For patients willing to participate in this research, they fill out an assessment form, as do family members. “I want to find a way to do treatment with family,” Wright says. “It needs to focus on long-term care to help

apy and rehabilitation is working. Kerber says, “It allows us to keep track of what we are doing and see the progression of patients. We look at it and ask ourselves, ‘Is there a way to do this better?’” Another advantage to keeping track of data is to show insurance companies that their methods work and quality of life is improved.



patients.” Once she collects data from patients at CNS, Wright is hopeful it will lead to Dialectical Behavior Therapy for brain trauma sufferers.

The sheer volume of brain injuries they treat allows CNS to see what works and what doesn’t. Through helping patients around the clock, doctors and staff get to know them inside and out. At the centre, there is documentation at every step so there is proof the ther-

Over 30 years have passed since CNS opened their doors locally to assist those with potentially life altering injuries. As a result of their research and commitment to the betterment of their patients, they have grown and continue to be a world leader in their field. More importantly, we can be certain that, should we ever need it, the best in care for brain trauma is right around the corner.

