



Lucky in Dog

Are You Here to See Dr. Bressler and Izzy, or Just Izzy?

by Daniel J. Bressler, MD

THE DOG-HUMAN BOND traces back into the shadows of human history. Dog bones are found in the earliest human dwellings, often interred with their owners. Whether as guardians, hunters, or friends, these near-wolves have found themselves a well-entrenched role in societies worldwide. Most scientists who have studied the dog-human relationship have concluded that part of the bond derives from the uncanny ability of dogs to read and respond to our emotional queues. Dogs may not have the highest IQ of the animal kingdom (that award would go to chimps, apes, or dolphins) but get the trophy for the highest EQ (emotional or empathy quotient). They are supremely skilled at connecting with our faces, our gestures, our moods.

Apart from dogs' practical utility demon-

strated from anthropological data, there is a growing body of medical evidence that dog ownership confers a broad array of physical health benefits. A recent article from *Circulation*, the American Heart Association's flagship journal, called "Pet Ownership and Cardiovascular Risk" (Levine et al, June 11, 2013), outlines a number of these, including reduced post-myocardial infarction mortality, decreased hypertensive responsiveness to social or physical stressors, increased physical activity, and improved lipid profiles. The article cautiously concludes that dog ownership "may have some role in reducing CVD risk [level of evidence, B]."

Studies on the social and psychological effects of human-dog interaction (HDI) are somewhat more complex and contradictory. That said, an emerging and

unifying concept correlates the beneficial effects with the enhanced release from the posterior pituitary of the peptide hormone oxytocin (OT). Recall that OT is classically understood as the substance responsible for postpartum milk letdown and uterine contractions. Its name actually comes from the Greek for "quick birth." We use a synthesized form, Pitocin (or, as the OBs call it, "Pit") to hasten contractions during delayed deliveries. But more recent research has revealed a huge repertoire of roles for OT in modifying the release of stress hormones (cortisol, epinephrine, and norepinephrine). Moreover, its behavior effects in both humans and multiple animal models include enhancing social bonding, decreasing aggressiveness, and increasing trust. Measurements of blood or saliva levels of OT appear to be an objective and easily measured surrogate for the health benefits of the DHI. And, to abbreviate a large body of research in a bite-sized phrase, it looks like enjoyable interactions between a dog owner and his dog significantly increases OT in both of them. An excellent recent review of this data can be found in "Psychosocial and Physiological Effects of Human-Animal Interactions: The Possible Role of Oxytocin," by Adrea Beetz, et al., as published in *Frontiers in Psychology*, July 2012, Volume 3, Article 234, pages 115.

About three years ago, we found our service dog, Izzy, after a three-month search. Several of the staff had hounds at home, and, over the previous year, we had experimented with a monthly Dog Friday. I knew

IZZY

*Izzy lives life physical
No concepts or abstractions
He tilts his muzzle quizzical
When a scene arrests his actions*

*Izzy lives life natural
He scratches where he itches
He eats until his belly's full
He dreams in yelps and twitches*

*Izzy lives life innocent
A state without offenses
An exaggerated world of scent
A cacophony of senses*

*Izzy lives for company
I'm safety in his sight
He wags his tail and runs to me
A bond of mutual delight*

*I took you from that shelter
Though even then I knew
To this calmness from that welter
As they say: Who rescued who?*

the logistics could work out if we found the right dog. We did. Izzy, a 32-pound male dachshund-Australian cattle dog mutt, came to us through a wonderful local rescue-and-placement organization called The Barking Lot. During the first trial week, he would spend the day at the office and go back to his foster home in the evening. After that, he started coming home with me at night and became my constant companion. He went through distinct behavioral phases. First, there was tremulous generalized anxiety, then hyper-bonding during which he would not let me out of his sight, and, finally, to relaxing and trusting his new life and so displaying what I consider a healthy mixture of devotion and rebellion. Overall, he's emerged as a dog who is mellow, attentive, and joyous. The salutary effect on my practice life has been striking. The staff members each receive a daily fix of canine petting and sloppy kisses. Patients seem calmer and more open in his presence. I can't but believe that everyone's oxytocin levels are substantially up. We have a sign at the reception area: "Are you here to see Dr. Bressler and Izzy, or just Izzy?" It's only half in jest. **SDP**

Dr. Bressler, SDCMS-CMA member since 1988, is chair of the Biomedical Ethics Committee at Scripps Mercy Hospital and a longtime contributing writer to San Diego Physician.