



**RICHARD DIENSTBIER**  
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Originally from the northeast, Dick Dienstbier had a slow academic start in Chemical Engineering, followed by service in the US Army. Dick was eventually seduced by psychology, receiving a PhD in social psychology from the University of Rochester. Ever since, he has haunted the halls of the UNL Psychology Department. During periods away he has been a Visiting Scholar and/or Visiting Professor at Cambridge University, the University of Canterbury in New Zealand, Adelaide University and the University of South Australia in (naturally) Australia.

At home in the UNL Psychology Department he served as Director of the Program in Social and Personality Psychology, as the Department Chair, and the Series Editor of the annually published “Nebraska Symposium on Motivation”. His research interests evolved from early studies of racial prejudice and moral decision making to later interests in stress and aging, leading to his recent book: “Building Resistance to Stress and Aging: The Toughness Model”.

**Building Resistance to Stress and Aging**

Aging and chronic or sustained stress both lead to mental and emotional deficits by damaging our brains. But we can prevent and even overcome that damage by regularly embracing activities that toughen us. Toughening activities include both mental challenges and physical exercise, staying engaged socially, meditating, (and this is the best part) even affectionate activities.

This is how toughening activities build resistance to stress and to aging: As we regularly engage in toughening activities, some of our genes become activated and other genes become deactivated—sometimes temporarily, but sometimes for a lifetime. Those genetic modifications enhance some important brain structures and those neural developments lead, in turn, to positive psychological and mental outcomes including emotional stability, enhanced energy, efficient cognitive functions, fluid intelligence, and even self control. Once toughness begins to develop, the experience of enhanced mental and physical energy, and of sustained mental abilities, allows us to optimistically approach life’s various challenges. Confronting those challenges toughens us even more. Thus we experience an upward spiral where toughness leads to choices that in turn continue to toughen us. Although his lecture is based on modern scientific research, the lecture is understandable for non-scientists.

**Gay or Straight: The Science of Sexual Orientation**

Sexual orientation is defined as whether we are sexually and romantically attracted to people of our gender, or to the other gender, or to both. Most of us did not experience being heterosexual, or homosexual, or bisexual, as a choice, and discussions about choice tell us little about the origin of our sexual orientation. But we gain a great deal of insight from modern scientific approaches to that question—science ranging from genetic studies to endocrinology and neuroscience. Dienstbier explains how genes and fetal exposure to hormones affect the development of the brains and bodies of all mammals, and how researchers can change the sexual orientation of any of our fellow mammals. Then we peer into the brains of humans and consider whether and how much our human experiences influence our sexual orientation. This lecture is all about science, not religious or moral issues. But having said that, no single scientific approach tell us everything that is fascinating, and some mysteries remain.

