David Carter: Risk taking and adolescence, these two concepts fit neatly together in popular culture, parenting, and pop psychology. Now, neuroscience has confirmed what others have long thought true, that adolescence willingly embrace physical risks that others would choose to avoid. This embracing of risk has something to do with their brains. What do this mean for the way we understand adolescent behavior, and in particular, our legal system’s approaches to it? To discuss the impact of this research on the law of negligence, I’m joined by legal academic David Thorpe, from the University of Technology in Sydney. David is a Senior Lecturer in the Faculty of Law. His work focuses right on this question of risk and it’s consequences. First, David, what is this recent neuroscience research telling us about the brain of the adolescent?

David Thorpe: Adolescence undergo a period where their brain changes in structure, that they become more likely to take a risk that they wouldn't take a matter of months earlier, or when they emerge into late adolescence or into adulthood, a risk that they would avoid. Now this has implications for tort, negligence and under the Civil Liability Act.

David Carter: In relation to the way that they act, I suppose the point really is about saying that they don't act appropriately in relation to risks. Is this about teenagers specifically, or is this about young adults or children?

David Thorpe: Well, this is really about teenagers. I could illustrate through the case of Dederer. Philip Dederer was a 14-year-old, and for the previous 10 years, had gone to Forster in the Mid-North Coast of New South Wales with his family for a holiday. Out of this period, he’d watched adults and children dive or jump from the Forster-Tuncurry Bridge. He decided one day, at the age of 14, he would go up there and give it shot himself. He went up the rails, stood on the top rail of the bridge, looked down at the water below, which he thought was deep. Alongside him was his mate, a guy called Grant Cunial, who was 18
years old, and they began to jump. After a couple of jumps, Dederer, again, got on the bridge. He said to the court, "I was going to jump, and then I though, no, I'll dive." In that impulse, he dived, hit a sandbank, and was rendered a partial quadriplegic.

David Carter: In that instance then, what's the court asked to make a decision about? This is a question of negligence. What's the law here?

David Thorpe: This was considered to be a recreational activity by the Court, under the Civil Liability Act. The question is, if it's a dangerous recreational activity, you are taken to have volunteered for the particular risk. Under the Act, it's dangerous if it would be obvious to a reasonable person in the position of that person. The court, The High Court said, that the risk was obvious, and therefore he was entirely liable. He had sued the RTA, and also the Great Lakes Shire Council. Now, both these bodies knew that there were people diving and jumping off the bridge. One of the major problems with the design of the bridge was that access to the top rail was quite easy. Ordinarily, you would think, well they have some responsibility, and yet, they didn't stop it.

David Carter: The question then should be, if the brain science and neuroscience research is showing that adolescents are more apt to take these kinds of risks, there should be some kind of account of this in relation to negligence claims made by young people, say in the case of Dederer.

David Thorpe: It all comes back to the idea of reasonable person in the position of that person, and if that victim, that adolescent can be seen as a class of person, then the characteristics of that class of person should - at least as I argue it - would be taken into account. When the adolescent hits puberty, there are two areas of the brain that come into play. One is called the socio-emotional area of the brain. This is concerned with the satisfaction of needs and drives. One of the drives that the adolescent develops is risk taking. This undergoes rapid development with the onset of puberty. The other part of the brain is cognitive-control-network. This is in the prefrontal cortex. What the role of this cognitive control network is, is to control risk.

Now, it used to be believed that with growing maturity, both of these areas of the brain would develop in a linear fashion. Recent neuroscience research indicates that this is not so. What happens is that the socio-emotional part of the brain accelerates at the onset of puberty, so it rises up quickly. The cognitive control network on the other hand, does not. It develops at a
generally constant linear rate. What you have is a power gap, if you like, between these two systems. The cognitive-control-network, which is meant to control the person in risk taking is over powered by the socioemotional part of the brain. Hence this is the reason so it seems, why adolescents are more willing to embrace risks.

David Carter: In relation to the case of Dederer then, if he’s going through these changes, is it a question justice and fairness then, in relation to holding him accountable and responsible for the risks that he took? Should there be something different for the courts to take into account here?

David Thorpe: Courts have long recognized that childhood is the time when you can’t expect adult responsibility from children. Those who are in the position to take care of children, or those in the position where children may ... where they may come across children or they offer activities to the children, must put in place additional means of protection. I don’t see, in principle, why there is any difference between the child who is, say, emotionally immature, and the adolescent who is emotionally unable to control the impulse to engage in risk taking activity. In addition to that, you wonder what is the point of introducing the Civil Liability Act; if they’re unable to judge correctly the response of that risk, the statute doesn’t serve its purpose.

David Carter: Because the statute there is asking, whether or not someone, not so much is aware of the risk, but rather whether they can actually do something about awareness. Is that your reading of it?

David Thorpe: Yes, that’s correct. An obvious risk is one that you detect. It’s assumed that if you see it, you won’t engage in it if it’s too risky, but does it include your capacity to judge that risk correctly? When you’re looking at, say, impulse control, the adolescent may see the risk, but the impulse to take the risk overpowers their intellectual skills, and they engage in it. If you’re aware that that class of person engages in this, then it’s reasonable to expect that you should then provide additional safeguards. One of the safeguards might be something as simple as a delaying mechanism. So, if we look at the railings along the bridge, if you delay that, so that rather than a few seconds, it might be difficult to get up there, It might take a couple of minutes, maybe the design has an arch in it that you have to try and negotiate. Is it too much trouble for the adolescent? Does it give them time to think? All this is now open to debate, even this neuroscience research.
David Carter: David, knowing now about this neuroscience research, your aim is then to open up debate, to see how the law can actually take account of this class of person, this class of risk taking teenagers.

David Thorpe: I would like to see this matter revisited. Given this new evidence, this must be a matter of consideration. This is necessary to prevent catastrophic injury.

David Carter: Thank you very much for your time David.