Scientist search brain for origins of risk-taking

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

At Stanford University, a rat faces a choice. If it presses one lever, it gets a fixed amount of sugar liquid. If it presses a second lever, it usually gets less but occasionally wins a sweet bonanza. This choice between a safe bet and a risky gamble is one of life's most recurring and most important. It affects whether an animal gets a meal or a teenager drunkenly climbs behind a wheel, whether an entrepreneur rakes in the cash or a global financial system collapses. And, if the Stanford rats are any indicator, it's a choice whose outcome can be predicted and controlled.

By studying the brains of these rodents, <u>Kelly Zalocusky</u> from Stanford University has <u>identified a specific</u> <u>group of neurons</u> that are involved in risky decision-making. Their activity reveals whether a rat is about to make a safe choice or take a punt on a bigger payoff. And by silencing these neurons at the right time, Zalocusky's team, led by Karl Deisseroth, could instantly (and temporarily) convert the risk-taking rodents into risk-avoiders.

If the same applies to humans, the study may have implications for treating addictive disorders. But perhaps more importantly, it reveals something about how we make decisions and where our attitudes toward risk come from. It's not about what we gain from winning, but about how we deal with losing.

Read full, original post: Scientists Can Now Watch the Brain Evaluate Risk