You may think you're in control when it comes to investing, but biology works against you in ways that science is only starting to understand.

The Thrill Is Wrong

by Jason Zweig

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The can't-lose proposition. The "next Microsoft." The chance of a lifetime.

Why can't we resist chasing the big score, even though we lose time after time? The problem, science tells us, is in our nature. The solution is in our heads.

Sometimes investing seems like a struggle for survival against mysterious and hostile forces, but our worst financial enemy is usually easy to find: We just need to look in the mirror. We said that we'd learned our lesson from the tech debacle in 2000; then we loaded up on real estate just in time for that bubble to begin leaking. We tell ourselves that we're too smart for get-rich-quick schemes—most of us, after all, do manage to avoid answering e-mails from exiled Nigerian princes—yet we still chase hot mutual funds, try flipping condos or pile into whichever stock is the "next Google."

Why do so many of us make such bad investing decisions even when we know better? A new breed of scientists dubbed "neuroeconomists" are starting to come up with some answers. Blending neuroscience, economics and psychology, these researchers are delving into how our brains work when we set out to make money in the markets. The more they learn, the clearer it becomes that we're wired to chase the big score—over and over again. The good news is, this research also makes it clear that we can conquer our own worst impulses. This special report will give you the tools you need to do just that.

In the rest of this story, I'll explain the quirks of your investing brain, and in the box on page 77, I'll give you five easy strategies for, in effect, outsmarting yourself. Then, in "Fix Our Mix" (page 78), you'll watch MONEY and a group of financial planners give an investing makeover to five families. Read how they could create rock-solid investing plans for themselves, and you'll have no trouble designing or updating your own—one of the best ways to be sure that your financial life never goes boom and bust. Finally, we offer the MONEY 65, our annual list of recommended funds—chosen not because they'll make you rich quick but because they are reliable, low-cost investments from which you can create a secure portfolio.

By the time you've finished our report, you'll be ready to tame the thrill seeker within. But the way to start is to face some facts about your own internal wiring.

High on Anticipation

You may think your investing decisions are the result of reasoned, careful analysis, but when scientists look at what happens in the brain of someone aiming for a financial reward, they see a brain on drugs.

Obviously a lot goes on in the brain when we invest, but it's clear that a chemical called dopamine plays a major role in the process. Not that dopamine is bad. It helps you regulate movement—Parkinson's sufferers don't have enough dopamine—and it focuses your attention, putting you on high alert for action and priming you for excitement. Neurons deep in your mental basement flood the emotional centers of your brain with dopamine when you anticipate basic pleasures like food and drink, drugs and sex. For better or worse, the same thing happens when you're confronted with an opportunity for an investing gain. And in the heat of the moment, you can't turn off the messages that dopamine sends out. That's why it's important to learn how your investing brain works—and how to lay plans to avoid acting on its impulses.

It turns out that the human brain reacts to an anticipated financial gain and to an