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In the news

NO SMOKE WITHOUT INSULA

A study in *Science* reported that people with damage to the insula, a brain area involved in the assessment of bodily states, found it much easier to give up smoking than people with lesions in other brain areas. Importantly, the insula-lesioned patients had no urge to start smoking again. "The problem people have in 'kicking' the smoking habit is cigarette craving — the urge to smoke… The most remarkable finding in this study is that damage to a particular brain area may block this urge," says Paul Matthews of Oxford University and Imperial College London (*BBC News Online*, 25 January 2007).

The insula was known to have a role in drug use, but now, according to Steven Grant of the US National Institute on Drug Abuse, it is important for researchers "to understand what the basic function of this area is and why it would be important in this kind of context" (*ScientificAmerican.com*, 25 January 2007).

Science senior editor Peter Stern found this type of study forward-looking: "In addition to investigating a basic scientific mechanism underlying drug addiction, these authors have come up with innovative ideas about how we may be able to treat addiction and prevent relapse" (*AAAS News Archives*, 25 January 2007). The latter is critical; according to Norman Edelman of the American Lung Association, "On average, people try quitting about five times before they succeed" (*Newscientist.com*, 25 January 2007).

For Paul Matthews the next step is to ask: "Could there be a surgical 'cure' for smoking?" (*BBC News Online*, 25 January 2007). However, Antoine Bechara, the study's lead researcher, says that since "the insula carries out lots of normal everyday functions… we would want to make sure we only interfere with functions that disrupt bad habits like smoking but not something vital like eating" (*Reuters*, 25 January 2007).

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