

2034: a spaced

PROFESSOR GERRY STIMSON

EXECUTIVE DIRECTOR,
INTERNATIONAL HARM REDUCTION ASSOCIATION

In 30 years time, the black and white of good and bad drugs will become a grey area. A different range of drugs will be available and this will change the way they are regarded by society. There is a potential for developing drugs with similar highs to today's illegal drugs but which are safer to use. They will be able to provide euphoric qualities without the dependence aspect. Identifying potential harm will be easier. So if they are safe there will be no need to regulate them, unless the authorities decide they just don't want people to have a good time. Drugs like heroin will be seen as a rather clumsy, unsophisticated way of getting a high. But will this new era of drugs drive out the old ones?

There is certain to be a blurring of the lines between drugs for pleasure and drugs for health – illegal and legal ones. They won't fit the usual categories. For example, Viagra and Prozac started off as medical treatments and now are being used to enhance experience. There will be more performance and cognitive enhancing drugs to enable us to think, memorise, feel, and perform better – they will be neither treatments for illnesses nor purely pleasure-seeking drugs.

We may have a situation where employers encourage their staff to use drugs like Modafenil, originally meant for narcolepsy but now used in the armed forces because it enables people to stay awake for more than 40 hours without major sleep deficit. Children could be giving themselves an advantage at exam time by taking memory-enhancing drugs. It raises huge ethical and social implications if they creep into common use.

The ageing population in 2034 will have been brought up with pleasure drugs, so everyone from grandmothers to children will have been surrounded by drug use. Coupled with the new range of drugs, we could see a generation of what I call 'silver sniffers' – pensioners who are still using drugs as part of their lifestyle. Drug use will continue into older age with a range of products that will arouse pleasure in the brain.

The technology of drug production might shift towards DIY methods. This already happens with opiates in Russia and with alcohol when it is banned or heavily taxed. New chemical technology and the information becoming increasingly available on the internet, may allow small-scale 'home-brew' chemists to become drug manufacturers for their own pleasure, or to set up as small-scale traders. People will create drugs from a 'lab on a chip' in their garage or you could have a device on your desk at home which manufactures performance-enhancing pills.

A menu of drug buzzes at the touch of a button, heroin highs without the lows and MDMA for the terminally ill.

Max Daly asks three drugs and science experts to think outside the box and give their predictions for drug use in 30 years time

“

We could see a generation of what I call 'silver sniffers' – pensioners who are still using drugs as part of their lifestyle

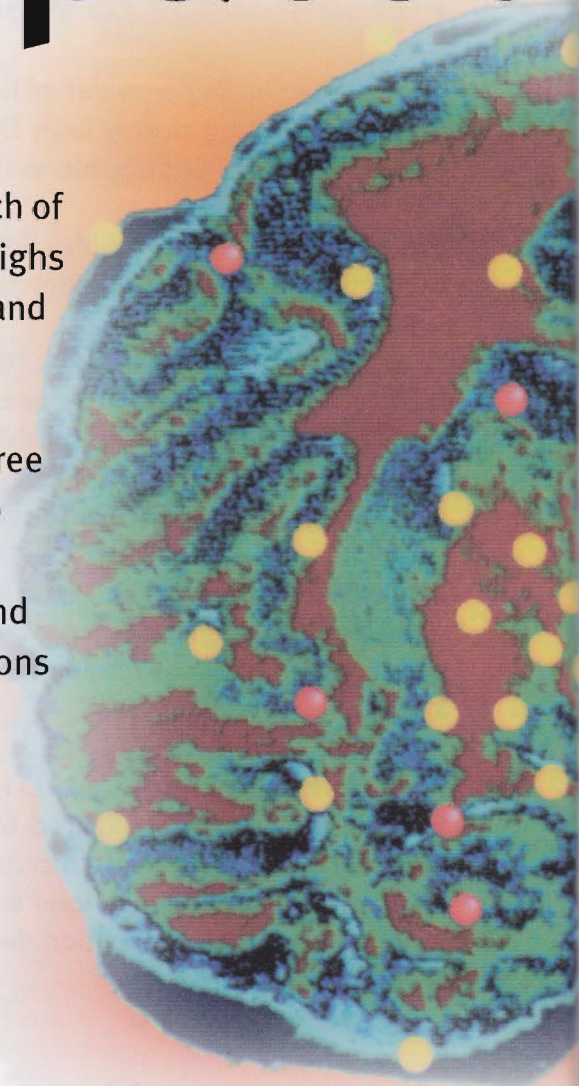
”

TONY DICKENSON

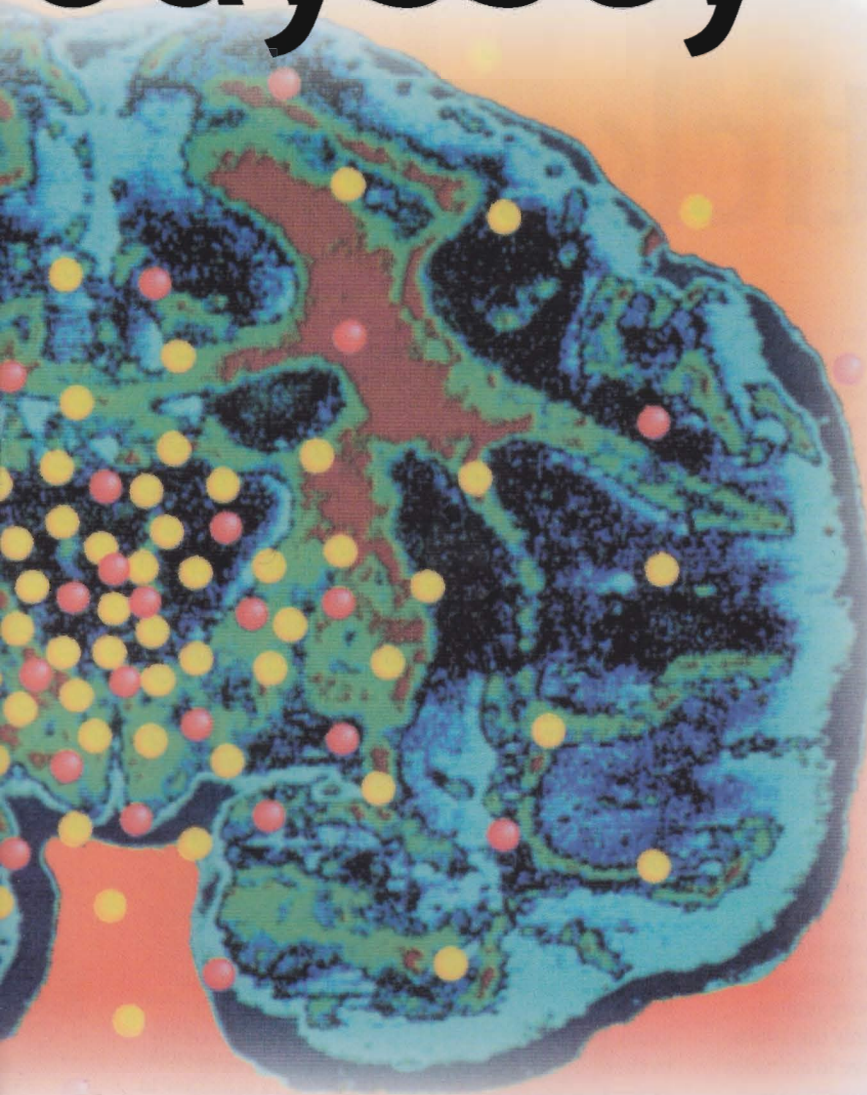
PROFESSOR OF NEUROPHARMACOLOGY,
UNIVERSITY COLLEGE LONDON

By 2034 we will understand more and more about the brain, the neural and chemical pathways and the myriad of transmitters involved in reward, pleasure, aversion, lows and the adverse long-term effects of drugs. The human genome project will reveal individual differences in how drugs handle our brains and how our bodies handle drugs. Neural networks and computer interactions with biological brains will advance. Brain imaging will pinpoint where changes occur in the brain – the highs and the lows and the stop and go signals.

Thus it may become possible to tailor drugs to individuals – avoiding side effects. We will be able to produce drugs with fast onsets linking administration with effect with come-downs so long and slow they become imperceptible. New methods of drug delivery, such as patches, are already arriving for medical drugs. So it is feasible that in the future people can achieve delivery of drugs into their system via their clothing.



odyssey



Your high could depend on what t-shirt you decide to put on in the morning.

Temporary chemical implants could act as deliverers into neural circuits that generate normal brain transmitters in defined areas, avoiding the need for impure external drugs. The reward and pleasure centres are activated internally. This could be controlled using portable mp3 players whereby people can dial up their buzz of choice.

We could also see the use of neuronal markers and brain imaging helmets to produce feedback between areas of the brain which activate pleasure and drugs. People could transfer information to others via neural interfaces. There could be links to sensory stimulators and responder devices whereby we could share tactile and other sensory information this way. Wireless connectors would be built into headwear and receivers placed over body. Neural interfaces could be used to transmit, rewind, share and wipe patterns of activity in parts of the brain involved in emotions, memories and pleasure and pain.

RICK DOBLIN

PRESIDENT OF THE MULTIDISCIPLINARY ASSOCIATION FOR PSYCHEDELIC STUDIES

The important thing in 30 years time will be the social contexts in which drugs are taken rather than refinements of the drugs themselves. What we will be seeing is a dramatic development where we will have thousands of 'psychedelic clinics' established throughout the US and Europe. The clinics will use LSD, psilocybin, MDMA, mescaline, peyote, ibogaine and other psychedelic drugs for the treatment of everything from post-traumatic stress disorder and marital therapy to depression and terminal illness.

These drugs, including ketamine, could also be used for treating crack or heroin addiction. The release of the repressed and the mystical experience gives users the strength to reorganise their lives. The clinics will be regulated environments, a cross between methadone clinics and hospice centres.

Religions will be authorised to set up their own drug influenced 'dying centres'. For example a Jewish man with six months to live would go to a clinic which would also have emergency room equipment and religious symbols. There would be a doctor there but it would be the Rabbi who sits with you when you are doing the MDMA. They may even read Jewish text while you are taking the MDMA.

Drugs will also be used as a 'rights of passage' aid for people. We will have formalised procedures in a number of religions where people aged from 13-21 will have individual and group psychedelic sessions to help them come to terms with this maturation process and how to come to terms with their lives. That's why kids already use it today at raves.

The fundamental shift we will make will be from a situation where the government says 'you cannot' to a situation where individuals decide what they will do. This is the key hope for humanity. People will be less able to be manipulated by government, less in need of scapegoats or conflicts because people will be able to sort through anxieties and fears. If we take psychedelic drugs, our emotional development will catch up with our technological development.

In a 'drug positive society', we will see drug use as a way of accessing the unconscious and a form of connection to our basic nature, rather than as a distortion of reality which is either abuse, addiction or escape. Instead it will be seen as a preventative medicine, a courageous exploration of our own inner struggles and an inspirational source of mystical understanding. ■

The Brain Science, Addiction and Drugs project, run by Foresight, will be publishing its findings on future drug use in mid-2005.

For details see www.foresight.gov.uk