

**PRESS RELEASE FROM
NEUROPSYCHOPHARMACOLOGY**

<http://www.nature.com/npp>

This press release is copyrighted to *Neuropsychopharmacology*. Its use is granted only for journalists and news media receiving it directly from the Nature Publishing Group.

*** PLEASE DO NOT REDISTRIBUTE THIS DOCUMENT ***

EMBARGO:

**1700 London Time (BST) / 1200 US Eastern Time Thursday 15 August 2013
0100 Japanese Standard Time / 0200 Australian Eastern Time Friday 16 August 2013**

Wire services' stories must always carry the embargo time at the head of each item, and may not be sent out more than 24 hours before that time.

Solely for the purpose of soliciting informed comment on *Nature* journal papers, you may show relevant parts of this document, and the papers to which it refers, to independent specialists – but you must ensure in advance that they understand and accept *Nature's* embargo conditions.

A PDF of the paper mentioned on this release can be found in the Academic Journals section of <http://press.nature.com>. Press contacts for the journals are listed at the end of this release.

Warning: This document, and the papers to which it refers, may contain sensitive or confidential information not yet disclosed to the public. Using, sharing or disclosing this information to others in connection with securities dealing or trading may be a violation of insider trading under the laws of several countries, including, but not limited to, the UK Financial Services and Markets Act 2000 and the US Securities Exchange Act of 1934, each of which may be subject to penalties and imprisonment.

PICTURES: To obtain artwork from *Neuropsychopharmacology*, you must first obtain permission from the copyright holder (if named) or author of the research paper in question (if not).

NOTE: Once a paper is published, the digital object identifier (DOI) number can be used to retrieve the abstract and full text from the journal web site (abstracts are available to everyone, full text is available only to subscribers). To do this, add the DOI to the following URL: <http://dx.doi.org/> (For example, <http://dx.doi.org/10.1038/ng730>). For more information about DOIs and Advance Online Publication, see <http://www.nature.com/ng/aop/>.

HYPE: We take great care not to hype the papers mentioned on our press releases, but are sometimes accused of doing so. If you ever consider that a story has been hyped, please do not hesitate to contact us at press@nature.com, citing the specific example.

PLEASE CITE NEUROPSYCHOPHARMACOLOGY AND ITS WEBSITE AS THE SOURCE OF THE FOLLOWING ITEMS. IF PUBLISHING ONLINE, PLEASE CARRY A HYPERLINK TO THE APPROPRIATE JOURNAL'S WEBSITE: <http://www.nature.com/npp>

[A HIV protein may increase craving for abused drugs](#) **PODCAST******

DOI: 10.1038/NPP.2013.201

A protein associated with HIV infection may increase vulnerability for cocaine abuse, according to a mouse study published in *Neuropsychopharmacology*.

Although psychostimulant abusers comprise one of the fastest growing populations of HIV-infected patients, relatively little is known about how HIV may impact the rewarding effects of abused drugs. It has been suggested that the virus may influence drug reward biologically, through the actions of a viral protein called HIV-1 Tat.

Jay P. McLaughlin and colleagues used genetic engineering to express HIV-1 Tat protein in the brains of mice and tested the behavioral response to cocaine. The presence of HIV-1 Tat increased both the stimulant and rewarding effects of cocaine, compared to mice in which HIV-1 Tat was absent. These results suggest that the

activity of HIV-1 Tat alone may be sufficient to enhance sensitivity to the properties of cocaine that can make it addictive.

Additional data shows that exposure to HIV-1 Tat protein caused reinstatement of cocaine-seeking behavior in mice that had undergone long periods of time without access to the drug. These results suggest that HIV-1 Tat protein contributes to heightened probability of relapse in abstinent cocaine-using individuals with HIV. The authors believe that just as addiction raises the risk of HIV, HIV may raise the risk of addiction.

Author Contact:

Jay P. McLaughlin (Torrey Pines Institute for Molecular Studies, Port Saint Lucie, FL, USA)

Tel: +1 772 345 4715; E-mail: jmclaughlin@tpims.org

Editorial Contact:

Natalie Marler (Neuropsychopharmacology, Brentwood, TN, USA)

Tel: +1 615 324 2371; E-mail: nmarler@acnp.org

Podcast:

A podcast regarding this paper is available at the URL below, and will go live with the paper:

http://www.nature.com/multimedia/podcast/hpp/npp_08152013.mp3

PRESS CONTACTS...

For media inquiries relating to embargo policy for all the Nature Research Journals:

Rachel Twinn (*Nature* London)

Tel: +44 20 7843 4658; E-mail: r.twinn@nature.com

Neda Afsarmanesh (*Nature* New York)

Tel: +1 212 726 9231; E-mail: n.afsarmanesh@us.nature.com

Eiji Matsuda (*Nature* Tokyo)

Tel: +81 3 3267 8751; E-mail: e.matsuda@natureasia.com

Lydia Chen (*Nature* China)

Tel: +86 21 2422 5021/+86 185 0210 2987; E-mail: Lydia.chen@macmillan.com

About Nature Publishing Group (NPG):

Nature Publishing Group (NPG) is a publisher of high impact scientific and medical information in print and online. NPG publishes journals, online databases and services across the life, physical, chemical and applied sciences and clinical medicine.

Focusing on the needs of scientists, *Nature* (founded in 1869) is the leading weekly, international scientific journal. In addition, for this audience, NPG publishes a range of *Nature* research journals and *Nature Reviews* journals, plus a range of prestigious academic journals including society-owned publications. Online, nature.com provides over 5 million visitors per month with access to NPG publications and online databases and services, including *Nature News* and *NatureJobs* plus access to *Nature Network* and Nature Education's Scitable.com.

Scientific American is at the heart of NPG's newly-formed consumer media division, meeting the needs of the general public. Founded in 1845, *Scientific American* is the oldest continuously published magazine in the US and the leading authoritative publication for science in the general media. Together with scientificamerican.com and 15 local language editions around the world it reaches over 3 million consumers and scientists. Other titles include *Scientific American Mind* and *Spektrum der Wissenschaft* in Germany.

Throughout all its businesses NPG is dedicated to serving the scientific and medical communities and the wider scientifically interested general public. Part of Macmillan Publishers Limited, NPG is a global company with principal offices in London, New York and Tokyo, and offices in cities worldwide including Boston, Buenos Aires, Delhi, Hong Kong, Madrid, Barcelona, Munich, Heidelberg, Basingstoke, Melbourne, Paris, San Francisco, Seoul and Washington DC. For more information, please go to www.nature.com.