

## Academic drug discovery in Europe:

### Development of new HIV drug targeting a cofactor of the cell

Researchers of the K.U.Leuven report in Nature Chemical Biology on the development of a new class of anti-HIV agents: the LEDGINs. Because HIV becomes resistant against current drugs, it remains important to develop new drugs preferentially directed against novel targets. In 2003 the research group of Dr. Zeger Debyser discovered how the virus uses LEDGF/p75, a protein of the cell, to integrate in the genome of the host cell. LEDGF/p75 acts as a molecular tether bridging the viral integration complex and the chromatin. In the context of the FP6 TRioH project, this group collaborated with many European partners to validate LEDGF/p75 as a genuine antiviral target. Today Dr. Debyser, who presently heads the FP7 integrated project THINC, announces the development of highly potent anti-HIV agents with clinical potential. This achievement required the input from a multidisciplinary team of medicinal chemists, virologists, structural biologists and modelers.

This breakthrough proves that it is possible to block HIV replication by targeting the interaction between a viral protein and a cellular cofactor. Researchers warn that years of clinical research still lie ahead.

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Link to Paper Nat. Chem. Biology:

<http://www.nature.com/nchembio/journal/vaop/ncurrent/full/nchembio.370.html>

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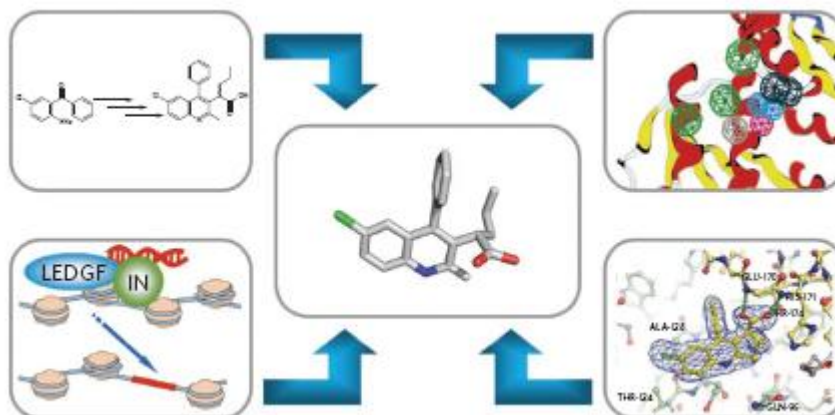


Figure taken from Nat. Chem Biology.