

ably reflecting GABA in glial cells. To obtain extracellular GABA, which is at least partially dependent on neuronal activity, GABA-ergic neurons have to be stimulated. To study the dopaminergic modulation of extracellular GABA levels in the substantia nigra reticulata, dopaminergic drugs were infused into the substantia nigra reticulata. A D₂ agonist did not affect GABA levels, while a D₁ agonist induced an increase in extracellular GABA levels, which persisted in the presence of tetrodotoxin, a drug that abolishes the nerve impulse-flow. Thus, the D₁ agonist affected GABA levels independent of neuronal activity. Further study is needed to elucidate the underlying mechanism.

Results have also been published in the following papers:

- Timmerman W, Westerink BHC, De Vries JB, Tepper PG, Horn AS. Microdialysis and striatal dopamine release: stereoselective actions of the enantiomers of N-0437. *Eur J Pharmacol* 1989;162:143-50.
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- Timmerman W, Rusk IN, Horn AS, Cooper SJ. The effects of the enantiomers of the dopamine agonist N-0437 on food consumption and yawning behaviour in rats. *Eur J Pharmacol* 1989;174:107-14.
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- Timmerman W, De Vries JB, Westerink BHC. Effects of D-2 agonists on the release of dopamine. Localization of the mechanism of action. *Naunyn Schmiedebergs Arch Pharmacol* 1990;342:650-4.
- Timmerman W, Tepper PG, Dijkstra D, Grol CJ, Westerink BHC, Horn AS. Enantiomers of monohydroxy-2-aminotetralin derivatives and their activity at dopamine autoreceptors as studied by brain dialysis. *Eur J Pharmacol* 1991;199:145-51.
- Timmerman W, Westerink BHC. Importance of the calcium content infused during microdialysis for the effects induced by D-2 agonists on the release of dopamine in the striatum of the rat. *Neurosci Lett* 1991;131:93-6.
- Timmerman W, Zwaveling J, Westerink BHC. Dopaminergic modulation of the GABA release in the substantia nigra reticulata. In: Rollema H, Westerink BHC, Drijfhout WJ, eds. *Monitoring molecules in neuroscience*. Groningen: University of Groningen, 1991:105-7.
- Timmerman W, Zwaveling J, Westerink BHC. Characterization of extracellular GABA in the substantia nigra reticulata by means of brain microdialysis. *Naunyn Schmiedebergs Arch Pharmacol* 1991;345:661-5.

The biotechnological production of podophyllotoxin and related cytotoxic lignans by plant cell cultures

• W. Van Uden

The abstract of Dr. W. Van Uden's doctoral thesis, published in *Pharm World Sci* 1993;15(1):41-3, unfortunately contained several printing errors. The address of Dr. Van Uden was incorrect; it should have read: Department of *Pharmacognosy*, University Centre for Pharmacy, University of Groningen, Ant. Deusinglaan 2, 9713 AW Groningen, the Netherlands. The status of Dr. N. Pras was omitted; he was a *referee* for this graduation. Finally, the keyword 'Celle, cultured' should have read *Cells, cultured*.