## Nýr doktor í geðlækningum

Þann 25. maí síðastliðinn varði Páll Matthíasson geðlæknir doktorsritgerð sína við Geðfræðastofnun Lundúnaháskóla (Institute of Psychiatry, University of London). Handleiðarar voru Prófessor Robert W. Kerwin, Institute of Psychiatry og Dr. Michael J. Travis, University of Pittsburg. Andmælendur voru Prófessor Thomas R. Barnes frá Imperial College, University of London og Prófessor Sean Spence frá University of Sheffield. Titill ritgerðarinnar var: Dealing with treatment resistance to clozapine: Characteristics of treatment response in schizophrenia. Hér á eftir fer ágrip ritgerðarinnar á ensku:

## Background:

Clozapine, the treatment of choice in treatment-resistant schizophrenia, is not effective in up to half of patients. Aims of this thesis were: to verify whether clozapine augmentation with amisulpride, an atypical antipsychotic with preferential affinity at dopaminergic D2-like receptors, is clinically effective; to test the prediction that changes in D2-like receptor availability might explain that improvement; to explore clinical and receptor availability characteristics of good clozapine responders.

## Methods:

Study 1: Thirty-three patients with schizophrenia, partially or non-responsive to clozapine, had augmentation with amisulpride using an open label design.

Study 2: Ten patients recruited from study 1 underwent 123I-IBZM SPET scans at baseline and after 10-12 weeks on amisulpride augmentation, to assess striatal D2-like receptor binding potential. Ten matched controls had one 123I-IBZM scan. Scanning was carried out using a Picker Prism 3000XP triple headed SPET camera.

Study 3: Ten "good" responders to clozapine monotherapy were matched to patients in study 2 and had one 123I-IBZM scan.

Páll fæddist í Reykjavík árið 1966 og eru foreldrar hans Matthías Guðjónsson verslunarmaður og Guðrún Guðjónsdóttir kennari. Hann útskrifaðist úr Menntaskólanum í Reykjavík 1986 og lauk embættisprófi frá læknadeild Háskóla Íslands 1994. Hann lauk sérfræðiprófi í geðlækningum frá Maudsleyspítalanum í Lundúnum og starfar nú sem yfirlæknir á The Huntercombe Hospital-Roehampton bar í borg, jafnframt því að stunda áfram rannsóknir við Geðfræðastofnun Lundúnaháskóla. Páll er kvæntur Ólöfu Björnsdóttur myndlistarmanni og eiga þau tvö börn, Valdemar og Júlíu.



Dr. Páll Matthíasson geðlæknir

## Results:

Study 1: Twenty-eight subjects (85%) completed 6 months' augmentation. There was a statistically significant improvement from baseline in clinical rating scales and no change in side-effects. 71% and 32% of patients showed a 20% and 50% reduction in BPRS respectively. Study 2: Patients had mean striatal D2-like receptor occupancy of 47% at baseline, which increased with amisulpride augmentation to 59%.

Study 3: Clozapine responders were on much lower doses of clozapine (331 mg/day) with lower s-clozapine levels (0.26 ng/L). Their D2-like occupancy was 45%. Conclusion: The augmentation led to substantial improvement in both positive and negative symptoms and was well tolerated. It raised D2-like binding to likely "threshold levels" for response. Some patients require both the broad receptor occupancy profile of clozapine and a higher degree of D2-like receptor occupancy than can be provided by clozapine alone.