

# NWO programma Brain and Congition: an integrated approach

## Format voor Eindverslag van Joint Forces Network Grants

**Dossiernr:** 433-08-109

**Naam Projectleider:** mw. dr. M.E. Rubio

**Titel:** "Neurochemistry modulation of cognitive function in galactosemia"

### 1. Participanten

Er hebben 19 personen deelgenomen:

- G. Berry, Pediatrician metabolic diseases and researcher, Children's Hospital Boston, Harvard medical School, MA, USA
- J. Bierau, Biochemist metabolic diseases, Maastricht University Medical Center, Maastricht, The Netherlands
- A. Bosch, Pediatrician Metabolic Diseases, Emma's Children Hospital, Academical Medical Center, Amsterdam, The Netherlands
- L. Elsas, Metabolic Diseases, biochemistry and molecular biology, University of Miami, USA
- J. Fridovich-Keil, Biochemist metabolic diseases, Emory University, USA
- M. Gasparri, Clinical pediatrician, Ospedale San Paolo, Milano, Italy
- C. Gubbels, PhD student, Maastricht University Medical Center, Maastricht, The Netherlands
- B. Jansma, Cognitive Neuroscientist, Faculty of Psychology and Neuroscience
- M. Jimenez, Family Medical Assistance, Madrid, Spain
- I. Keularts, Clinical Biochemist metabolic diseases, Maastricht University Medical Center, Maastricht, The Netherlands
- S. Mangia, Biophysics/Radiology, University of Minnesota, USA
- A. Ohlsson, Biochemist, Centre of Inherited Metabolic Diseases, Stockholm, Sweden
- K. Õunap, Geneticist, Tartu University Hospital, Estonia
- N. Potter, Clinical psychologist, Washington State University-Spokane, USA
- E. Rubio, Pediatrician metabolic diseases, Maastricht University Medical Center, Maastricht, The Netherlands
- L. Spaapen, Clinical Biochemist metabolic diseases, Maastricht University Medical Center, Maastricht, The Netherlands
- S. Staubach, Biochemist, University Köln, Germany
- I. Timmers, Psychology research student galactosemia project, Faculty of Psychology and Neuroscience Maastricht, The Netherlands
- E. Treacy, Pediatrician Metabolic diseases, Children's University Hospital, Dublin Ireland

### *Bilage 1. Programma*

### 2. Inhoudelijk verslag

Tijdens deze workshop is:

1. het cognitieve profiel van deze kinderen besproken, in het bijzonder taal/spraak problematiek en geheugen,
2. de benadering vanuit cognitieve neurowetenschappen perspectief bediscussieerd,
3. de verschillende pathofysiologische hypothesen uiteen gezet en
4. de toepasbaarheid van nieuwe technologieën besproken om de cellulaire processen die ten gronde liggen te kunnen exploreren.

### 3. Eindresultaten

Dit heeft geresulteerd in een pre-proposal voor de subsidieronde *Programs for Excellence* binnen thema Brain and Cognition. Deze aanvraag is geselecteerd om een full-proposal te schrijven (zie bijlage).

## Neurochemistry modulation of cognitive function in galactosemia

---

<b>Date:</b>	May 19, 2009
<b>Location:</b>	Faculty of Psychology and Neuroscience, UNS 40, room 5.772, Maastricht University, Maastricht, The Netherlands
<b>Topic:</b>	Brain and cognition

---

9:30 – 10:00	Welcome Prof. Dr. B. Jansma, Faculty of Psychology and Neuroscience and Dr. E. Rubio, Maastricht University Medical Centre, The Netherlands
10:00 – 10:45	Cognition, motor skills, language and speech of classic galactosemia patients Dr. N Potter, Washington State University-Spokane, USA
10:45 – 11:30	Galactose metabolism in brain development and function Prof. Dr. J. Fridovich-Keil, Emory University, USA
11:30 – 12:15	Myo-inositol deficiency: a role in pathophysiology? Prof. Dr. Gerry Berry, Harvard Medical School, USA
12:30 – 14:00	Lunch
14:00 – 14:45	Cognitive neuroscience of language processing Prof. Dr. B. Jansma, Cognitive Neuroscience Maastricht University, The Netherlands
14:45 – 15:30	Dynamics of metabolic concentrations in the human brain: the use of fMRI Dr. S. Mangia, Centre for Magnetic Resonance Research, University of Minnesota, USA
15:30 – 16:00	Tea break
16:00 – 17:00	Discussion Moderator: E. Daniels, Maastricht University, The Netherlands
17:00 – 17:30	Closing remarks and definitive plans regarding integrated multidisciplinary research theme: Neurochemistry modulation of cognitive function in galactosemia Dr. E. Rubio, Maastricht University Medical Centre, The Netherlands