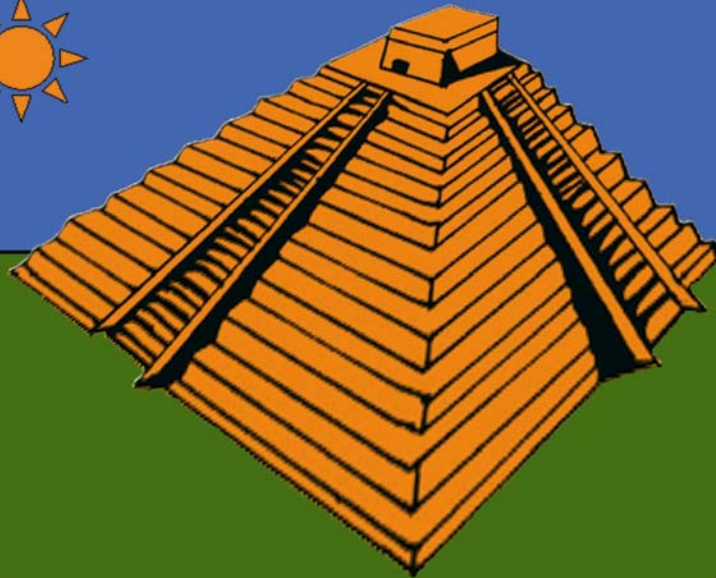
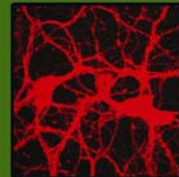


**8th ISN Advanced
School of Neurochemistry**
Neurodegenerative Conditions: Causes & Cures



**August 15 -19, 2007
Valladolid, Mexico**



Program and Abstracts

ISN School Committee

- **Philip Beart** (chair), Melbourne, Australia
- **Roger Butterworth**, Montreal, Canada
- **Augustina Garcia**, Barcelona, Spain
- **Eckart Gundelfinger**, Magdeburg, Germany
- **Lourdes Massieu**, Mexico City, Mexico
- **Marco Prado**, Belo Horizonte, Brazil
- **Alois Saria**, Innsbruck, Austria
- **David Shine**, Houston, USA
- **Hermona Soreq**, Jerusalem, Israel
- **Ursula Sonnewald**, Trondheim, Norway

ISN Officers

- **Roger Butterworth (President)**, Montreal, Canada
- **Augustina Garcia (Secretary)**, Barcelona, Spain
- **David Shine (Treasurer)**, Houston, USA

2007 Organizing Committee

- **Philip Beart**, Melbourne, Australia
- **Lourdes Massieu**, Mexico City, Mexico
- **Linda Mercer**, Melbourne, Australia
- **David Shine**, Houston, USA
- **Susan McGuire**, Maywood, USA
- **Sheilah Jewart**, Windermere, USA

Faculty

- **Stuart Lipton**, La Jolla, USA
- **Evan Snyder**, La Jolla, USA
- **Allan Butterfield**, Lexington, USA
- **Luis Barbeito**, Montevideo, Uruguay
- **Wendy Macklin**, Cleveland, USA
- **Malcolm Horne**, Melbourne, Australia
- **Monica Carson**, Riverside, USA
- **Andrew Hill**, Melbourne, Australia
- **Ursula Sonnewald**, Trondheim, Norway
- **Howard Gendelman**, Omaha, USA
- **Ian Reynolds**, West Point, USA
- **Roberto Cappai**, Melbourne, Australia
- **Robert Snodgrass**, Los Angeles, USA
- **Victor Villemagne**, Melbourne, Australia
- **Roger Butterworth**, Montreal, Canada
- **David Shine**, Houston, USA
- **Philip Beart**, Melbourne, Australia

Time Schedule

Wednesday, 15th August

Supper – Welcome event

21.15 - 21.20 Welcome
Philip Beart, Melbourne

21.20 – 22.20 Opening Lecture
Stuart Lipton, La Jolla
“A Success in Drug Development by Academia:
Uncompetitive/Fast Off-Rate (UFO) Drug Therapy for
Neurodegenerative Disorders of Excitotoxicity and Protein
Misfolding – Memantine and Beyond”

Thursday, 16th August

Session 1: **Degenerative mechanisms**

Chair: David Shine

9.00 – 10.00 Lecture 1
Ursula Sonnewald, Trondheim
“Energetics as it pertains to neurodegeneration”

10.10 – 11.10 Lecture 2
Alan Butterfield, Lexington
“Oxidative Stress: A Key Contributor to Neurodegeneration.
Alzheimer’s Disease as An Example with Insights from Redox
Proteomics and the Role of Amyloid Beta-peptide1-42”

Coffee break / Posters

11.40 – 12.20 Lecture 3
Philip Beart, Melbourne
“Pro-apoptotic Mitochondrial Signaling & Neurodegeneration”

12.30 – 13.00 Lecture 4
Roger Butterworth, Montreal
“Neurotoxicity of Ammonia”

13.00 – 14.00 Lunch

Session 2: **Neurodegenerative conditions: causes & cures I**

Chair: Howard Gendelman

14.30 – 15.30 Lecture 5
Roberto Cappai, Melbourne
“The Amyloid Beta Theory of Alzheimer’s Disease”

15.40 – 16.40 Lecture 6
Robert Snodgrass, Los Angeles
“Huntington’s disease”

Coffee break / Posters

17.10 – 18.10 Lecture 7
Evan Snyder, La Jolla
“The Homeostatic Pressure Exerted by Stem Cells in Degenerative or Injured CNS Environments”

18.30 – 19.30 *Supper*

Student presentations (session 1)

Chairs: Philip Beart & Lourdes Massieu

19.45 – 20.45 (approximately)

Friday, 17th August

Session 3: Inflammation and degenerative mechanisms

Chair Evan Snyder

8.30 – 9.30 Lecture 8
Monica Carson, Riverside
“Inflammatory processes: astro- and microgliosis”

9.40 – 10.40 Lecture 9
Howard Gendelman, Omaha
“NeuroAIDS”

Coffee break / Posters

11.10 – 12.10 Lecture 10
Andrew Hill, Melbourne
“Prion disease”

12.20 – 12.50 Lecture 11
David Shine, Dallas
“Gene transfer technologies”

12.50 – 14.00 *Lunch*

Afternoon *Leisure time / Excursion*

18.30 – 19.30 *Supper*

Student presentations (session 2)

Chairs: Roger Butterworth & Susan McGuire

19.45 – 20.45 (approximately)

Saturday, 18th August

Session 4: Neurodegenerative conditions: causes & cures II

Chair: Alan Butterfield

9.00 – 10.00 Lecture 12

Luis Barbeito, Montevideo

"Cellular and Molecular Mechanisms Involved in the Pathogenesis of Motor Neuron Loss in ALS"

10.10 – 11.10 Lecture 13

Wendy Macklin, Cleveland

"Signaling mechanisms controlling myelination"

Coffee break / Posters

11.45 – 12.45 Lecture 14

Malcolm Horne, Melbourne

"Parkinson's disease"

12.45 – 13.45 Lunch

Session 5: Tackling neurodegeneration in the clinic

Chair: Malcolm Horne

15.00 – 16.00 Lecture 15

Victor Villemagne, Melbourne

"Molecular Imaging Applied to the Evaluation of Neurodegenerative Diseases"

Coffee break

16.30 – 17.30 Lecture 16

Ian Reynolds, West Point

Neurotherapeutics: challenges in the pharmaceutical industry

Farewell Party

Sunday, 19th August

8.30 Transfer to Airport & ISN Congress