

Chair's Welcome address

ISGC 15th Workshop
Salt Lake City, Utah
April 3-5 2014

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Overview of SLC Program

- Quality Program
- Updates: Working groups, SiGN and METASTROKE
- New session on Grant proposals
- Scientific Abstracts

ISGC -International Stroke Genetics Consortium

- 8th year, initially established in 2007.
- Founding Chair: Prof Jonathan Rosand, followed by Prof Arne Lindgren.

Guiding principles

- Cerebrovascular disease is a complex disorder influenced by variation in many genetic and non-genetic exposures, each of which contributes only a small influence on disease risk. Therefore large (larger than any single centre can assemble on its own) well-characterised samples will be necessary to discover these exposures.
1. *The ISGC is open to all who can contribute*
 2. *All contributions will be fairly recognised in publication*
 3. ***We work together in a spirit of co-operation and open communication in order to promote the best science in the present and the best science in the future***

Governance of ISGC

- Statutes developed in Krakow 2012.
- **Elections for two new SC members due this Autumn 2014.**
- <http://www.strokegenetics.org/>
- **ISGC Governance is intended to be informal but with enough organisational structure to provide support to the hosts for each 6/12 monthly Scientific Workshop, plus provide support to working groups.**
- ISGC Steering Committee (SC)
- **8 elected members**
- Adjuncts
 - ISGC Convenor: Thomas Battey
 - ISGC Webmaster: Steve Bevan
 - Scientific Committee Chair and Co chair
 - Working groups Representative
 - Analytic working group
 - Imaging working group
 - Outreach working group
- **Monthly TC**
- **Minutes available on ISGC website**
- **Newsletters**

ISGC Steering Committee- who are we?

Steering Committee:

- Jane Maguire (Chair), 2 year term
- Dan Woo (Vice-Chair),
- Arne Lindgren (Previous Chair)
- James Meschia,
- Guillaume Paré,
- Agnieszka Slowik,
- Cathie Sudlow,
- Israel Fernandez-Cadenas,

Adjuncts and invited guests:

- Thomas Battey, Steve Bevan, Jennifer Majersik, Paul Nyquist, Jonathan Rosand, Stephanie Debette, Brad Worrall, Christopher Anderson, Natalia Rost, Sudha Seshadri



Arne Lindgren (Past Chair)



Dan Woo (Vice-Chair)

Agnieszka Slowik



Cathie Sudlow



James Meschia



Israel Fernandez-Cadenas



Guillaume Pare



ISGC Scientific Committee

- Scientific Committee: Stephanie Debette (Co-Chair/Incoming host), Myriam Fornage, Christina Jern, Arne Lindgren (Previous host) Jenny Majersik (**Chair/Current host**), Paul Nyquist, and Guillaume Paré (Co-Chair)



Minority population

Utah Prairie dogs: *Cynomys parvidens*

These burrowing rodents are classified as an endangered species

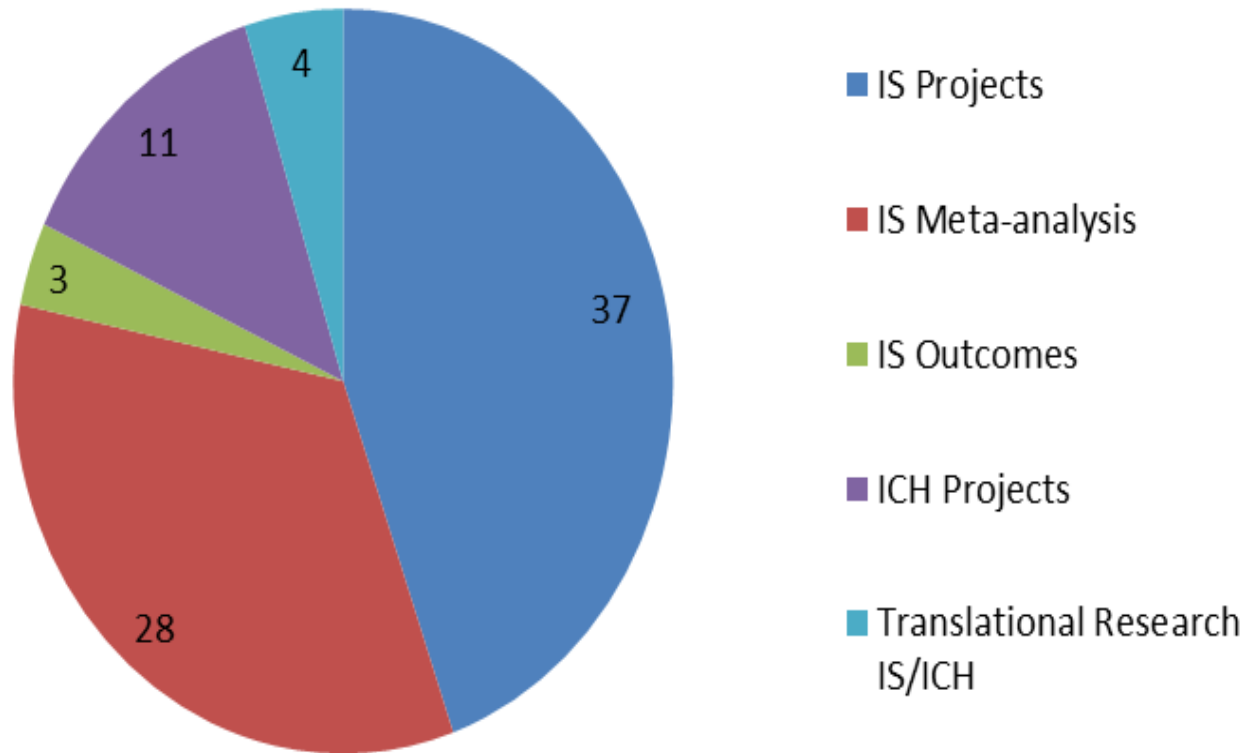
ISGC Activities 2014

- **6/12 Workshops**
 - Lund November 2013, Host: Arne Lindgren
 - SLC Spring , 2014, Host : Jennifer Majersik
 - Paris Autumn, 2014 Host : Stephanie Debette
- **2014 Grants submitted, multiple collaborative efforts...**
 - NHMRC (Australia), National Heart Foundation (Australia) British Heart Foundation/Stroke Society, Horizon 2020 (EU), Swedish funding bodies, NIH (USA) and more...
- **Conferences attendance planned for 2014**
 - ISC San Diego, ESC, and Stroke Society of Australasia, WSF and more...
- **Analytic techniques-** novel directions
- **Proposal Matrix-** Paul Nyquist

ISGC Scientific findings 2009-current.....

- Shared Genetic susceptibility to ischemic stroke and coronary artery disease: a genome-wide analysis of common variants Dichgans M, et al **Stroke** 2014 45:24-36.
- Genome-wide analysis of blood pressure variability and ischemic stroke. Yadav S, et al **Stroke** 2013; 44:2703-2709
- Novel insights into the genetics of **intracerebral haemorrhage**. Biffi A et al **Stroke** 2013; 44:S137
- 17q25 locus is associated with white matter hyperintensity volume in ischemic stroke, but not with lacunar stroke status. Adib-Samii P, et al. **Stroke** 2013; 44:1609-1615
- Heritability Estimates Identify a Substantial Genetic Contribution to Risk and Outcome of **Intracerebral Hemorrhage**. Devan WJ, et al. **Stroke** 2013 44:1578-1583.
- Common variants within oxidative phosphorylation genes influence risk of ischemic stroke and **intracerebral haemorrhage**. Anderson CD, et al. **Stroke**. 2013 Mar;44(3):612-9
- Ischemic stroke is associated with the ABO locus: the EuroCLOT study. Williams FM, **Ann Neurol**. 2013 Jan;73(1):16-31
- Genetic Risk Factors for Ischaemic Stroke and its Subtypes (the METASTROKE Collaboration): A Meta-analysis of Genome-Wide Association Studies. Traylor M, et al. **Lancet Neurology** 2012;11: 951-962.
- Common Variants at 6p21 are Associated With Large Artery Atherosclerotic Stroke Holliday EG, et al **Nature Genetics** 2012, 44:1147-1151.
- Burden of risk alleles for hypertension increases risk of **intracerebral haemorrhage**. Falcone GJ, et al. **Stroke**. 2012;43:2877-83
- Are myocardial infarction-associated single-nucleotide polymorphisms associated with ischemic stroke? Cheng YC, et al. **Stroke** 2012, 43:980-6.
- Genome-wide Association Study Identifies a Variant in HDAC9 Associated With Large Vessel Ischemic Stroke. International Stroke Genetics Consortium (ISGC) et al. **Nature Genetics** 2012, 44:328-33.
- APOE Genotype and Extent of Bleeding and Outcome in Lobar **Intracranial Haemorrhage**: A Genetic Association Study. Biffi A. et al. **Lancet Neurology** 2011, 10:702-709.
- Genetic Variant on Chromosome 12p13 Does not Show Association to Ischaemic Stroke in 3 Swedish Case-Control Studies. Olsson S, et al. **Stroke** 2011, 42:214-216.
- Variants at APOE influence Risk of Deep and Lobar **Intracerebral Hemorrhage**. Biffi, A. et al. **Annals of Neurology** 2010; 68:934-943.
- The Causative Classification of Stroke System. An International Reliability and Optimisation Study. Arsava, EM. et al. **Neurology** 2010, 75:1277-1284.
- Common Mitochondrial Sequence Variants in Ischaemic Stroke. Christopher D. Anderson, et al. **Annals of Neurology** 2010 - Advanced Online Publication
- The Association of the 4q25 Susceptibility Variant for Atrial Fibrillation is Limited to Stroke of Cardioembolic Etiology. Lemmens, R. et al. **Stroke** 2010, 41: 1850-1857
- Failure to Validate Associations Between 12p13 Variants and Ischaemic Stroke. International Stroke Genetics Consortium and Wellcome Trust Case Control Consortium 2 et al. **New England Journal of Medicine** 2010; 362:1547-1550
- Sequence Variants on Chromosome 9p21.3 Confer Risk for Atherosclerotic Stroke. Andreas Gschwendtner et al. **Annals of Neurology** 2009; 65:531-539.

Active ISGC proposals



Ideas for ISGC Directions generated by Membership during Lund Meeting, November 2013.....

IDEAS	ACTIVITY
1. Centralised infrastructure	Biobank- on hold Data repository- grants submitted for individual level data pipeline
2. Functional studies/ strategies to improve translation	Translational Science Working Party
3. Grant development support	Grant Discussion Session SLC
4. Data library	Collate existing phenotype and genotype data Target 100 000 cases
5. Scientific Directions	Discussions at Steering committee level on role of Scientific Committee
6. Common project	Ensure from SLC Grant Session
7. Networking and Outreach	Welcome letters, Introduction of new members at start of Workshops
8. Broader international scope	Continue to seek minority groups

We welcome your involvement.....

- **Please contact any of the Steering committee or Adjunct members.....**
 - Writing groups- group specific
 - Data sharing- ongoing
 - Data management- ongoing
 - Grant writing support- evolving
 - Working groups- contact respective Chairs

Participation in Workshops leads to increased collaborative research