GEOMED 2015 PROGRAM

up to date: September 3, 2015

September, 10-12 – Florence, Italy

Meeting venue:
September, 10-11 – Via Gino Capponi, 9 (rooms 4 and 5 – ground floor)
September, 12 – Via Laura, 48 (rooms 3 and 5 – first floor)

Supported by
08:30 – 08:50 - Registration

08:50 – 09:00 - room 4 - Welcome to Geomed 2015 Annibale Biggeri and Emanuela Dreassi

09:00 – 10:40 - Sessions

- (Chair) DUNCAN LEE - room 4
Estimating the effects of air pollution on health using spatio-temporal data
09:00 – 09:25 (Invited) Gavin Shaddick
Mitigating the effects of preferentially selected monitoring sites for environmental policy and health risk analysis
09:25 – 09:50 (Invited) Sujit Sahu, Sabyasachi Mukhopadhyay
On generating a flexible class of non-stationary spatial models using Gaussian predictive processes
09:50 – 10:15 (Invited) Duncan Lee, Alastair Rushworth
Quantifying the long-term effects of air pollution on health using spatio-temporal data
10:15 – 10:40 (Contributed) Silvia Liverani, Marta Blangiardo, Aurore Lavigne
Modelling highly collinear spatial data: application to pollution and the multiple deprivation index

- (Chair) ROBERT HAINING - room 5
Geography and Public Health
09:00 – 09:25 (Invited) Matthew Wang, Robert Haining
Inequality and inequity of access to primary care in China: a GIS based study from Jinan City
09:25 – 09:50 (Invited) Clive Sabel
Public health impacts of city policies to reduce climate change: findings from the URGENCE EU-China project
09:50 – 10:15 (Invited) Ravindra Maheswaran
Outdoor air pollution and stroke - an overview
10:15 – 10:40 (Invited) Yu-tzu Wu
Adding an environmental context to public health research: community environment and the health of older people

10:40 – 11:00 - Coffee Break

11:00 – 12:40 - Sessions

- (Chair) RENATO MARTIN ASSUNÇÃO - room 4
New directions in Bayesian analysis of spatial epidemiology
11:00 – 11:25 (Contributed) Francesco Bartolucci, Gaia Bertarelli, Maria Giovanna Ranalli
Bayesian spatial latent Markov models for disease mapping
11:25 – 11:50 (Invited) Veronica J Berrocal, Alan E Gelfand
A generalized conditionally autoregressive (CAR) model
Where geography lives? A spectral projection approach for spatial confounding
12:15 – 12:40 (Invited) Miguel A Martinez-Beneito, Marc Marí-Dell’Olmo
Incorporating statistical design in multivariate ecological regression studies

- (Chair) ANNETTE ERSBØLL - room 5
Health geopolitics using nation-wide health-related registers and individual level data
11:00 – 11:25 (Invited) Ulf Strömberg, Stefan Peterson, Erik Holmberg, Anders Holmén
Geomapping of melanoma incidence per stage - a method for addressing skin screening targets
11:25 – 11:50 (Invited) Annette Kjær Ersbøll, TM Kjærulff, GH Gislason, J Schipperijn
Geographical differences in mortality of acute myocardial infarction in Denmark, 2005-11
11:50 – 12:15 (Invited) Eero Pukkala
Mapping cancer risk and related issues? Nordic experiences of using small area based smoothing
12:15 – 12:40 (Invited) Elias T Krainski, Finn Lindgren, Daniel Simpson, Håvard Rue
Applying a non-separable spatio temporal model to a point referenced public health data
12:40 – 14:00 - Lunch
14:00 – 15:40 - Sessions
- (Chair) ROBERT DEARDON - room 4
Recent advances in spatial infectious disease modelling
14:00 – 14:25 (Invited) Niel Hens, Giancarlo De Luca, Kim Van Kerckhove, Chiara Poletto, Vittoria Colizza
Meta-population models and the spread of infectious diseases: quantifying the impact of spatio-temporal mixing behaviour of adults and children
14:25 – 14:50 (Invited) Sebastian Meyer, Leonhard Held
Combining social contact data with time series models for infectious diseases
14:50 – 15:15 (Invited) Gyanendra Pokharel, Rob Deardon
Gaussian process emulators for spatial models of infectious disease
Accelerating the detection of space-time clusters for vector-borne diseases

- (Chair) SUE C GRADY - room 5
Geospatial Technology Applications in Health Intervention Studies
14:00 – 14:25 (Invited) Raechel A Bianchetti
Geospatial modeling the urban green environment for health intervention studies
14:25 – 14:50 (Invited) Arika Ligmann-Zielinska
Using time-dependent variance based sensitivity analysis to identify the drivers of lifestyle change in an agent-based model of obesity dynamics
14:50 – 15:15 (Invited) Sue C Grady
Population health in planned shrinkage urban areas
15:15 – 15:40 (Contributed) Marta Blangiardo, Michela Cameletti, Francesco Finazzi
Using drug prescriptions to assess the effect of air pollution on respiratory diseases in England

15:40 – 16:00 - Coffee Break
16:00 – 17:40 - Sessions
- (Chair) MARIA DOLORES UGARTE - room 4
Tests and models in spatial epidemiology
16:00 – 16:25 (Invited) Toshiro Tango
On the recent debate on SatScan for prospective surveillance
16:25 – 16:50 (Invited) Alessandro Fassò
Spatio temporal estimation of the population exposure distribution for functional epidemiology
16:50 – 17:15 (Invited) Cristina Rueda, Dolores Ugarte, Ana Militino
Checking unimodality using isotonic regression: an application to breast cancer mortality rates
17:15 – 17:40 (Contributed) Thomas Neyens, Christel Faes, Geert Molenberghs
The spatial combined model for overdispersed zero-inflated count data

- (Chair) MARTA BLANGIARDO - room 5
Small area case event data
16:00 – 16:25 (Contributed) Chawarat Rotejanapraserat, Andrew B Lawson
Online Bayesian surveillance for small area case event data
16:25 – 16:50 (Contributed) Helena Batista, Jorge M Mendes
The risk of alcohol abuse disorder in Portugal. A disease mapping approach
16:50 – 17:15 (Contributed) Roseanne Autran, Hugo Teixeira, Ana Isabel Ribeiro, Maria de Fátima de Pina, Jan Degrín, Jorge Mota, Maria Paula Santos
Association between neighborhood walkability, residential density, land-use mix and moderate physical activity: an exploratory study in Porto
17:15 – 17:40 (Contributed) Rachel Moss Carrol, AB Lawson, C Faes, RS Kirby, M Aregay, K Watjou
Spatially-dependent model selection for disease mapping
FRIDAY, 11 Sept – Via Gino Capponi, 9

09:00 – 10:40 - Sessions

- (Chair) ANDREW B LAWSON - room 4
Health surveillance and infectious diseases
09:00 – 09:25 (Invited) Ana Corberán-Vallet, Andrew B Lawson
Surveillance of small area disease data with a Bayesian model-based approach
09:25 – 09:50 (Invited) Robert Deardon
Approximate inference for spatial epidemic models
09:50 – 10:15 (Invited) Andrew Lawson, Chawarat Rotejanaprasert
Kullback-Leibler measures and spatial surveillance of small area health data
10:15 – 10:40 (Invited) Christel Faes
Spatio-temporal dynamics of new emerging diseases

- (Chair) FRANCESCO FINAZZI - room 5
Ecological studies
09:00 – 09:25 (Contributed) Neil Coffee, Lockwood, Rossini, Niyonsenga
Spatial socioeconomic status and health research
09:25 – 09:50 (Contributed) Ana Isabel Ribeiro, A Pires, M Sá Carvalho, MF Pina
Neighbourhood correlates of physical activity among southern European older adults: parks and non-residential destinations matter, but crime doesn’t
09:50 – 10:15 (Contributed) Lianne McLeod, C Waldner, L Bharadwaj, S Jin, L Lix, L Ford, S Ferris
Ecological study of associations between water quality and type 2 diabetes in rural Saskatchewan
10:15 – 10:40 (Contributed) Tomki Nakaya, Yuri Ito, Akiko Ioka, Tomio Nakayama
Modelling geographic disparities in relative cancer survival at the neighbourhood level in Osaka prefecture, Japan

10:40 – 11:00 - Coffee Break

11:00 – 12:40 - Sessions

- (Chair) YING C MACNAB - room 4
Recent works in disease mapping and spatial statistics
11:00 – 11:35 (Invited) Rhonda J Rosychuk
Spatial Scan statistics using data on emergency department presentations
11:35 – 12:10 (Invited) Maria Dolores Ugarte, Adin A, Goicoa T
Two-level spatial effects in space-time disease mapping
12:10 – 12:40 (Invited) Ying C MacNab
Linear model of coregionalization for multivariate lattice data

- (Chair) PENELOPE VOUNATSOU - room 5
Spatial epidemiology: methods and applications
11:00 – 11:35 (Invited) Penelope Vounatsou
Geostatistical modelling of sparse survey data
11:35 – 12:10 (Invited) D Catelan, Cecconi, Grisotto, Lagazio, Rinaldi, Musella, Cringoli, Biggeri
Preferential sampling and Bayesian geostatistics
12:10 – 12:40 (Invited) Frédérique Chammartin, Guojing Yang
Modelling spatial patterns of cause-specific mortality in Switzerland

12:40 – 14:00 - Lunch
14:00 – 15:15: Poster session

- **Sandra Alves**, Carla Oliveira, Vanderlei Matos, Ana Isabel Ribeiro, Hugo Teixeira, Maria de Fatima de Pina
  Empirical bayesian rates: currently available tools are not age-standardizing the rates!

- **Shabnam Asghari**, Oliver Hurley, Alvin Simms, Marshall Godwin, James Valcour, Kris Aubrey-Bassler, Douglas Howse, John Knight, Saeed Samet
  Digital epidemiology chronic disease tool (depict): dynamic visualization of health data for chronic disease in newfoundland and labrador

- **Claudia Berlin**, Radoslaw Panczak, Marcel Zwahlen
  Do CVD and stroke mortality vary by distance to hospitals in Switzerland?

- **Gianluca Boo**, SI Fabrikant, S Leyk, A Pospischil
  An innovative geographical approach to spatial epidemiology: dasymetric refinement of dog tumor incidence location data in Switzerland

- **Areti Bouliani**, Marta Blangiardo
  Disease surveillance on asthma using baystdetect

- **Rachel Moss Carroll**, AB Lawson, C Faes, RS Kirby, A Aregay, K Watjou
  Comparing INLA and OpenBugs for hierarchical Poisson modeling in disease mapping

- **Yi Gong**, Chris White, Scott Orford, David Fone
  Can the physical environment you live in influence your disability-free life expectancy?

- **Guowen Huang**, Duncan Lee, Marian Scott
  An integrated Bayesian model for estimating the long-term health effects of air pollution by fusing modelled and measured pollution data: a case study of nitrogen dioxide concentrations in Scotland

- **Oliver Hurley**, Shabnam Asghari, Alvin Simms
  Health selective migration analysis of patients diagnosed with diabetes in newfoundland and labrador

- **Mehreteab Aregay**, **Andrew B Lawson**, Christel Faes, Russell S Kirby, Rachel Carroll, Kevin Watjou
  Multiscale measurement error models for aggregated small area health data

- **Denis Leroux**, Lyne Cloutier
  Sexually transmitted diseases, blood-borne infections and geography: from spatial data to geostatistics

- **Hanna Leona Lokys**, Jürgen Junk, Andreas Krein
  Combined impact of air quality and thermal stress on human health

- **Edgar Mojica Urosa**
  Search for spatial patterns in the transmission of influenza in Mexico

- **Gary Napier**, Duncan Lee, Chris Robertson
  Quantifying the changing health inequalities in measles susceptibility in Scotland as a result of the mmr vaccination scare

- **Rikke Baastrup Nordborg**, Bjarne Laursen, Annette Kjær Ersbøll
  Clusters of multiple sclerosis in Denmark 1971–2013

- **Carla Oliveira**, Teixeira H, Economou T, Bailey T, Pina MF
  Effects of regional drinking water composition on the spatial distribution of hip fracture risk in women

- **John Pearce**
  Development of exposure metrics for multipollutant air quality in for health effects studies.

- **Saraya Tavornpanich**, Edgar Brun, Mathilde Paul
  Spatio-temporal analysis of gill disease in norwegian farmed atlantic salmon

- **Hugo Teixeira**, P Norton, A Azvedo, MF Pina
  Indoor geographical information system: an innovative approach to analyze health events inside an hospital
15:15 – 15:35: Coffee Break

15:35 – 17:40 - Sessions

- (Chair) DANIELA COCCHI - room 4
  Human health and environment
  15:35 – 16:05 (Invited) Tomas Goicoa, Etxeberria J, Ugarte MD, Militino AF
  Aproximate bayesian inference for age-space-time P-spline models
  16:05 – 16:35 (Invited) Francesco Finazzi, Michela Cameletti
  Identification of spatio-temporal patterns in Italian hospitalization rates using time series and cluster analysis
  16:35 – 17:05 (Invited) Janine B Illian
  Spatial point process modelling in practice - implications for model fitting and interpretation
  Choosing sensible priors for Bayesian spatial analysis in epidemiology

- (Chair) MARIA DE FÁTIMA PINA - room 5
  Health geography and spatial data
  The geography of cost of end of life care in Switzerland
  16:05 – 16:35 (Contributed) Fanjasoa Rakotomanana, Hobiniaina A Rakotoarison, Noël H Ratovonirina, Felana A Ihantamalala, Voahangy Rasolofo, Rindra V Randremanana, Patrice Piola
  Case studies of GIS in public health: benefits and limits in Madagascar
  16:35 – 17:05 (Contributed) Carla Oliveira, Maria de Fátima Pina
  Spatial-temporal analysis of climate factors effects on stroke hospitalization (2000-2010)
  17:05 – 17:40 (Contributed) Mathilde C Paul, Flavie L Goutard, Floriane Roulleau, Davun Holl, Weerapong Thanapongtharm, Annelise Tran
  Validation of a spatial multicriteria decision analysis of the risk of highly pathogenic avian influenza H5N1 in Thailand and its application in Cambodia

19:30 – 24:00 - Social Dinner – Caffetteria delle Oblate (Via dell’Oriuolo, 24/26)
09:00 – 10:40 - Sessions

- (Chair) EMANUELA DREASSI - room 3
  Space-time dependencies
  09:00 – 09:25 (Invited) Emanuela Dreassi
  Space-time shared models: some compatibility issues on model specification
  09:25 – 09:50 (Invited) D Catelan, AM Vicedo-Cabrera, L Grisotto, Corrado Lagazio, A Biggeri
  A spatio-temporal Bayesian kriging to predict children exposure to gaseous air pollutants in a high risk area in Italy
  09:50 – 10:15 (Invited) J Goldstein, Murali Haran, O Bjornstad, A Liebhold
  Quantifying Spatio-Temporal Variation of Invasion Spread
  10:15 – 10:40 (Contributed) Thora Majlund Kjærulff, Annette Kjær Ersbøll, Gunnar Gislason, Jasper Schipperijn
  Geographical clustering of incident acute myocardial infarction in Denmark: a spatial analysis approach

- (Chair) CHIARA SEGHIERI - room 5
  Advances in the modelling of the spatial distribution of diseases
  09:00 – 09:25 (Contributed) C Sloan, R Bradshaw, T Philip, B Barber, V Walker, R Graul, C Tuttle, J Johnston
  GPS-enable real-time concentration and composition of PM2.5 in an infant population
  09:25 – 09:50 (Contributed) Alexandre Magalhães, Castiglione D, Ramos E, Pina MF
  Proximity to urban green spaces can reduce social inequalities in levels of physical activity and practice of sports among teenagers
  09:50 – 10:15 (Contributed) Kristine Bihrmann, Søren Saxmose Nielsen, Annette Kjær Ersbøll
  Spatial pattern in prevalence of an infectious disease subject to diagnostic misclassification
  10:15 – 10:40 (Contributed) Loren Cobb, Ashok Krishnamurthy
  Bayesian tracking of the 2014-15 western African Ebola virus disease epidemic using data assimilation

10:40 – 11:00 - Coffee Break

11:00 – 12:40 - Sessions

- (Chair) PATRICK BROWN - room 3
  Point location data in spatial epidemiology
  11:00 – 11:25 (Invited) Rasmus Waagepetersen
  Analysis of multi-species point patterns using multivariate log gaussian Cox processes
  11:25 – 11:50 (Invited) Peter Neal
  Efficient MCMC for spatial S – > I epidemic models
  11:50 – 12:15 (Contributed) Christian Kreis, Michael Grotzer, Heinz Hengartner, Ben Spycher
  Space-time clustering of childhood cancers in Switzerland
  Lithium in drinking water and suicide: a danish nationwide register-based cohort study using spatial analysis

- (Chair) LAURA GRISOTTO - room 5
  Spatial and space-time analyses of health data
11:00 – 11:25 (Contributed) Simone Del Sarto, Pasquale Pepe, Marco Marchi, Giuseppe Rossi
A new global test for disease clustering

11:25 – 11:50 (Contributed) Tom De Smedt, K Simons, A Van Nieuwenhuyse, G Molenberghs
Comparing MCMC and INLA for disease mapping with bayesian hierarchical models

11:50 – 12:15 (Contributed) Shabnam Asghari, Oliver Hurley, Alvin Simms, Marshall Godwin
Assessing geographic variations in diabetes in newfoundland and labrador: disparities in diabetes diagnosis in rural and urban areas

12:15 – 12:40 (Contributed) Francesca Pannullo, D Lee, E Wadlawski, AH Leyland
Improving spatial nitrogen dioxide prediction using diffusion tubes for better health effects estimation: a case study in west central Scotland

12:40 – 13:00 - room 3 - See you at Geomed 2017, Porto (PT) Maria de Fátima Pina