

Stavros Nikolakopoulos, PhD

CONTACT INFORMATION

Department of Primary Education
University of Ioannina
45110 Ioannina, Greece
E-mail: snikolakopoulos@uoi.gr

EXPERTISE

Statistics (classical & Bayesian), probabilistic simulations (R programming), statistical consulting, statistics education, Clinical trials, Experimental design

PROFESSIONAL EXPERIENCE

ACADEMIA, REGULATORY & NON - PROFIT

University of Ioannina, Ioannina, Greece

Post-doctoral researcher, Department of Primary Education - Evidence Synthesis Methods Team, PI: Dr. Dimitris Mavridis
Nov. 2019 - Present

Athens University of Economics and Business, Athens, Greece

Post-doctoral researcher, Department of Statistics, PI: Prof. Ioannis Ntzoufras
Mar. 2018 - Present
Adjunct Lecturer
Sep. 2018 - Present

National and Kapodistrian University of Athens, Athens, Greece

Lecturer, Medical School
Sep. 2018 - Feb. 2019

Dutch Medicines Evaluation Board (CBG-MEB), Utrecht, The Netherlands

Statistical Assessor
Feb. 2017 - Jan. 2018

University Medical Center Utrecht, Utrecht, The Netherlands

Guest Assistant Professor, Department of Biostatistics
Jan. 2018 - Present
Assistant Professor, Department of Biostatistics
Sep. 2016 - Dec. 2017
Researcher - Lecturer, Department of Biostatistics
Sep. 2014 - Aug. 2016
PhD candidate, Department of Biostatistics
Sep. 2011 - Aug. 2014
Researcher, Department of Biostatistics
Jun. - Aug. 2011
Researcher, Department of Medical Technology Assessment
Jun. 2010 - May 2011

University of Bath, Bath, UK

Visiting Scholar, Department of Mathematical Sciences
Oct. - Dec. 2013

TEACHING EXPERIENCE

Athens University of Economics and Business, Athens, Greece

- Biostatistics I, BSc in Statistics, Spring Semester 2018-2019 (Department of Statistics, 4 hrs/week)
- Categorical Data Analysis, BSc in Statistics, Spring Semester 2018-2019 (Department of Statistics, 4 hrs/week)
- Introduction to R, MSc in Business Analytics (Department of Management Science and Technology)
- Professional Seminars in R (Department of Statistics & Department of Management Science and Technology)

National and Kapodistrian University of Athens, Athens, Greece

- Medical Statistics (MSc in Stress Management and Health Promotion, Medical School)

University Medical Center Utrecht, Utrecht, The Netherlands

- Classical Methods in Data Analysis (MSc Epidemiology, UMC Utrecht)
- Modern Methods in Data Analysis (MSc Epidemiology, UMC Utrecht)
- Clinical Trials and Drug Risk Assessment (MSc Epidemiology, UMC Utrecht)
- Basics of Biostatistics (postgraduate course, UMC Utrecht)
- Introductory Biostatistics for Researchers (postgraduate course, UMC Utrecht)
- Clinical Research Designs (MSc in Statistics for the Social, Behavioural and Biomedical Sciences, Utrecht University)

MEMBERSHIP IN RESEARCH PROJECTS

University of Ioannina, Ioannina, Greece

- COMPAR-EU (H2020): Comparing effectiveness of self-management interventions in 4 high priority chronic diseases in Europe, WP5: Develop statistical models to disentangle the effect of components of self-management interventions (SMIs) as complex interventions

Athens University of Economics and Business, Athens, Greece

- Project: Bayesian Variable Selection for Network Meta Analysis, DRASI-2, Principal Investigator: Prof. I Ntzoufras
- Project: Using Evidence Synthesis Techniques in Bayesian Variable Selection for large n - small p datasets, DRASI-2, Principal Investigator: Prof. I Ntzoufras

University Medical Center Utrecht, Utrecht, The Netherlands

- COMBACTE (IMI) : Clinical trial design in the area of multi-drug resistant bacteria
- ASTERIX (EU FP7) : Clinical trial design for research in small populations

SUPERVISING PHD STUDENTS

University Medical Center Utrecht, Utrecht, The Netherlands

- Ruben van Eijk, UMCU Neurology, Clinical trial design for ALS - *graduated September 2019, cum laude*

- Konstantinos Pateras, UMCU Biostatistics, Series of trials for small populations

SUPERVISING MSc STUDENTS

- Maria Leska, MSc in Biostatistics, National and Kapodistrian university of Athens
- Timo Brakenhoff, MSc in Methodology and Statistics for the Social, Behavioral and Biomedical Sciences, Utrecht University

PRIVATE SECTOR

Prolepsis Institute of Preventive Medicine, Environmental and Occupational Health,
Athens, Greece

Senior Statistician **Jan. 2018 - Aug. 2018**

Mapi Group, Houten, The Netherlands

Senior Research Associate **Sep. 2014 - Sep. 2015**

Kantouni cafe, Andros, Greece

Waiter - Bartender **Jun. -Aug. 2009**

Focus Bari S.A. Athenian Research Center, Athens, Greece

Ad-hoc Research Executive Assistant **Jan. 2008 - Jun. 2009**

E-value S.A., Athens, Greece

Phone Agent **Jul. 2003 -Aug. 2004**

EDUCATION

Utrecht University, Utrecht, The Netherlands

Graduate School of Life Sciences, Department of Biostatistics

Ph.D. in Biostatistics, Sep. 2016

- Dissertation: "Hybrid Bayesian-frequentist approaches for randomized trial design in small populations", ISBN 978-90-393-6609-7
- Promoters: Prof. Dr. Kit CB Roes, Prof. Dr. Karel GM Moons, Co-Promoter: Dr. Ingeborg van der Tweel

Utrecht University, Utrecht, The Netherlands

Graduate School of Behavioral and Social Sciences, Department of Methodology and Statistics

MSc (*cum laude*), Methodology and Statistics of Behavioural and Social Sciences (2-years Research Master programme), Jun. 2011

- *Thesis title: "Decision-making in clinical development: selecting a biomarker for phase II and predicting the outcome of phase III", supervised by Prof. Dr. Kit CB Roes, Dr. Willem M van der Wal and Prof. Dr. Herbert Hoijtink, graded 9*

University of Piraeus, Piraeus, Greece

Department of Statistics and Insurance Science

Diploma in Statistics and Insurance Science (4-year degree), Sep. 2008

HONORS, AWARDS & GRANTS

Italian Biometric Society

- Young Statistician Award, July 2019, Accompanied by a travel grant of \$650

Athens Medical Society, Open Technologies Alliance (GFOSS) and the Hellenic Society of eHealth Services and Education

- 1st prize, 1st Health Datathon conducted in Greece, May 2019, Accompanied by a financial prize of €1000
- Anonymized data sets from the Greek E-Prescribing System and the Business Intelligence System of the Ministry of Health were available at the Datathon. Our winning project was entitled "A patient's Diagnostic Journey: Detection of potential overuse of diagnostic tests through electronic health records"

Utrecht University

- Best Student Prize, MSc Methodology and Statistics of Behavioural and Social Sciences (2011)
- Graduated cum laude (With distinction, MSc)

Centraal Bureau voor de Statistiek (Statistics Netherlands)

- Best Thesis Award, 2011, awarded by CBS to the best thesis in the Research Master, financial award of €5000

Grants acquired

- DRASI-2 funding acquired (~€10000) from Athens University and Economics and Business, together with Prof. I. Ntzoufras, for conducting postdoctoral research, October 2019
- DRASI-2 funding acquired (~€12000) from Athens University and Economics and Business, together with Prof. I. Ntzoufras, for conducting postdoctoral research, December 2017
- HIT-CF Europe, H2020 755021 - personalized treatments for Cystic Fibrosis, granted (~€6.7m), 2017. Member of the submission consortium
- Personal fellowship of €4000 acquired from Saal van Zwanenberg foundation to perform a research visit to the University of Bath, UK, September 2013

PUBLICATIONS

Purely Statistical

Brakenhoff, T., Roes K.C.B. , van der Tweel, I. and **Nikolakopoulos S** , Bayesian sample size re-estimation using power priors, *Statistical Methods in Medical Research*; 2019

Pateras K, **Nikolakopoulos S** and Roes KCB, Data generating models of dichotomous outcomes: Heterogeneity in simulation studies for a random-effects meta-analysis, *Statistics in Medicine*; 2018

Nikolakopoulos S , van der Tweel I and Roes KCB, Dynamic borrowing through empirical power priors that control type I error, *Biometrics*; 2018

Nikolakopoulos S , Roes KCB and van der Tweel I, Sequential designs in small populations: Evaluations and recommendations for normal responses, *Statistical Methods in Medical Research*; 2018

Nikolakopoulos S , van der Wal WM and Roes, KCB An analytical approach to assess the predictive value of biomarkers in Phase II decision making, *Journal of Biopharmaceutical Statistics*; 2013

Methodological

van Eijk RPA, **Nikolakopoulos S** , Roes KCB, Middelkoop BM, Ferguson TA, Shaw PJ, Leigh PN, Al-Chalabi A, Eijkemans MJC and van den Berg LH, Critical design considerations for time-to-event

endpoints in amyotrophic lateral sclerosis clinical trials, *Journal of Neurology, Neurosurgery and Psychiatry*; 2019

de Kraker MEA, Sommer H, de Velde F, Gravestock I, Weiss E, McAleenan A, **Nikolakopoulos S**, Amit O, Ashton T, Beyersmann J, Held L, Lovering AM, MacGowan AP, Mouton JW, Timsit JF, Wilson D, Wolkewitz M, Bettiol E, Dane A and Harbarth S, Optimizing the Design and Analysis of Clinical Trials for Antibacterials Against Multidrug-resistant Organisms: A White Paper From COMBACTE's STAT-Net, *Clinical Infectious Diseases*; 2018

van Eijk RPA, Eijkemans MJC, Rizopoulos D, van den Berg LH and **Nikolakopoulos S** Methods to combine functional loss and mortality in clinical trials for amyotrophic lateral sclerosis, *Clinical Epidemiology*; 2018

van Eijk RPA, **Nikolakopoulos S** , Ferguson T, Liu D, Eijkemans MJC and van den Berg LH, Increasing the efficiency of clinical trials in neurodegenerative disorders using group sequential trial designs, *Journal of Clinical Epidemiology*; 2018

Pateras K, **Nikolakopoulos S** , Mavridis D and Roes KCB, Interval estimation of the overall treatment effect in a meta-analysis of a few small studies with zero events, *Contemporary Clinical Trials Communications*; 2018

van Smeden M, de Groot JH, **Nikolakopoulos S**, Bertens LCM, Moons KGM and Reitsma JB, Generic nomogram for multinomial prediction models: theory and guidance for construction, *Diagnostic and Prognostic Research*; 2017

Nikolakopoulos S , Roes KCB and van der Tweel I, Sample size calculations in pediatric clinical trials conducted in the ICU - A systematic review, *Trials*; 2014

Applied

van Eijk RPA, Eijkemans MJC, **Nikolakopoulos S**, Jansen MD, Westeneng HJ, van Eijk KR, van der Spek RAA, van Vugt JJFA, Piepers, Groeneveld GJ, Veldink JH, van den Berg LH, van Es MA, Pharmacogenetic interactions in amyotrophic lateral sclerosis: a step closer to a cure?, *The Pharmacogenomics Journal*; 2019

Nicolaidou E, Kanelleas A, Mikrova A, **Nikolakopoulos S**, Bezrondii G, Nearchou K, Gerodimou M, Papadopoulou-Skordou E, Papparizos V, and Rigopoulos D, A short, 8-week Course of Imiquimod 5% Cream versus Podophyllotoxin in the Treatment of Anogenital Warts: a Retrospective Cohort Study, *Indian journal of dermatology, venereology and leprology*; 2019

Goedee S, Notermans NC, Visser LH, van Asseldonk JTH, Franssen H, Vrancken A, **Nikolakopoulos S** , van den Berg LH and van der Pol, Neuropathy associated with IgM monoclonal gammopathy: a combined sonographic and nerve conduction study, *Muscle & Nerve*; 2019

Dalma A, Petralias A, Tsiampalis T, **Nikolakopoulos S** , Veloudaki A, Kastorini CM, Papadimitriou E, Zota D, and Linos A, Effectiveness of a school food aid programme in improving household food insecurity; a cluster randomized trial, *European Journal of Public Health*; 2019

Telleman JA, Herraets IJT, Goedee HS, Verhamme C, **Nikolakopoulos S**, van Asseldonk JTH, van der Pol LW, van den Berg LH, and Visser LH, Nerve ultrasound: a reproducible diagnostic tool in peripheral neuropathy, *Neurology*; 2019

van Eijk RPA, Westeneng HJ, **Nikolakopoulos S**, Verhagen IE, van Es MA, Eijkemans MJC, and van den Berg LH, Refining eligibility criteria for amyotrophic lateral sclerosis clinical trials, *Neurology*; 2019

Mitroiu M, Oude Rengerink K, Pontes C, Sancho A, Vives R, Pesiou S, Fontanet M, Torres F, **Nikolakopoulos S**, Pateras K, Rosenkranz G, Posch M, Urach S, Ristl R, Koch A, Spinelli L, van der Lee JH and Roes KCB, Applicability and added value of novel methods to improve drug development in rare diseases, *Orphanet Journal of Rare Diseases*; 2018

Jansen-Van Der Weide MC, Gaasterland CMW, Roes KCB, Pontes C, Vives R, Sancho A, **Nikolakopoulos S**, Vermeulen E and Van Der Lee JH, Rare disease registries: Potential applications towards impact on development of new drug treatments, *Orphanet Journal of Rare Diseases*; 2018

Kappelle WFW, Van Leerdam ME, Schwartz MP, Bulbul M, Buikhuisen WA, Brink MA, Sie-Go DSM, Pullens HJM, **Nikolakopoulos S**, Van Diest PJ, Leenders M, Moons LMG, Bogte A, Siersema PD and Vleggaar FP, Rapid on-site evaluation during endoscopic ultrasound-guided fine needle aspiration of lymph nodes does not increase diagnostic yield; a randomized, multicenter trial, *American Journal of Gastroenterology*; 2018

Mulder T, Kluytmans M, de Smet AM, van 't Veer N, Roos D, **Nikolakopoulos S**, Bonten M and Kluytmans J, Prevention of severe infectious complications after colorectal surgery using preoperative oral antibiotic prophylaxis (PreCaution): rationale and design of a multicenter, double-blind, randomized, placebo-controlled trial, *Trials* ; 2018

van Eijk RPA, Eijkemans, MJC, **Nikolakopoulos S** , Veldink J and van den Berg LH, Monitoring amyotrophic lateral sclerosis disease progression with plasma creatinine, *Journal of Neurology, Neurosurgery and Psychiatry* ; 2018

Prince JF, van den Bosch MAAJ, Nijssen JFW, Smits MLJ., van den Hoven AF, **Nikolakopoulos S**, Wessels FJ, Bruijnen RCG, Braat MNGJA, Krijger GC, Lam MGEH. and Zonnenberg BA, Efficacy of radioembolization with ¹⁶⁶Ho microspheres in salvage patients with liver metastases, *Journal of Nuclear Medicine*; 2018

van den Munckhof B, Alderweireld C, Davelaar S, van Teeseling HC, **Nikolakopoulos S**, Braun KPJ and Jansen FE, Treatment of electrical status epilepticus in sleep: clinical and EEG characteristics and response to 147 treatments in 47 patients, *European Journal of Paediatric Neurology*;2018

Goedee S, Jongbloed BA, van Asseldonk JH, Hendrikse J, Vrancken AJ, Franssen H, **Nikolakopoulos S**, Visser LH, van der Pol LH and van den Berg LH, A comparative study of brachial plexus sonography and magnetic resonance imaging in chronic inflammatory demyelinating neuropathy and multifocal motor neuropathy, *European Journal of Neurology*; 2017

Timsit JF, de Kraker MEA, Sommer H, Weiss E, Bettiol E, Wolkewitz M, **Nikolakopoulos S**, Wilson D and Harbarth S, Appropriate endpoints for evaluation of new antibiotic therapies for severe infections: a perspective from COMBACTE's STAT-Net, *Intensive Care Medicine*; 2017

Goedee S, van Asseldonk JH, Franssen H, Notermans NC, Vrancken AJ, van Es MA, **Nikolakopoulos S**, Visser LH, van den Berg LH, Diagnostic value of sonography in treatment-naive chronic inflammatory neuropathies, *Neurology*; 2016

Karabis A , **Nikolakopoulos S**, Pandhi S, Papadimitropoulou K, Nixon R, Chaves RL and Moore RA, High correlation of VAS pain scores after 2 and 6 weeks of treatment with VAS pain scores at 12 weeks in randomised controlled trials in rheumatoid arthritis and osteoarthritis: meta-analysis

and implications, *Arthritis Research & Therapy*; 2016

BOOK CHAPTERS Discovering Statistics Using R, Andy Field, Jeremy Miles, and Zoë Field, translation to Greek (Chapter 12). *Propobos Publications*

WORKING PAPERS

Statistical/Methodological

Nikolakopoulos S and Ntzoufras I, Evidence Synthesis for Bayes Factors

Pateras K, **Nikolakopoulos S** and Roes KCB, Borrowing strength from short-term outcomes while accounting for selection bias in orphan drug development processes

Pateras K, **Nikolakopoulos S** and Roes KCB, , Prior distributions for variance parameters in a sparse-event meta-analysis of a few small trials

Nikolakopoulos, S. and Janssen, M.P., Extending the Mann-Kendall test to allow for measurement uncertainty and partial ties.

Applied

van Eijk RPA, Roes KCB, **Nikolakopoulos S**, Gold J, and van den Berg, LH for the TRICALS Consortium, Overhauling clinical trials for amyotrophic lateral sclerosis: the Lighthouse II trial design

INTERNATIONAL PRESENTATIONS - INVITED Dynamic borrowing through empirical power priors that control type I error *Networking Conference - Italian Region of the International Biometric Society*, Naples, Italy, July 2019

Dynamic borrowing through empirical power priors that control type I error *Biostatistics Seminar*, University Medical Center Heidelberg, Germany, May 2019

Model-based subgroup identification *Seminar on Statistical issues in Regulatory Decision making*, Utrecht, the Netherlands, Apr. 2019

Dynamic borrowing through empirical power priors that control type I error *Eastern Mediterranean Region-International Biometric Society Conference*, Jerusalem, Dec. 2018

Prospective inclusion of historical efficacy data *ASTERIX end symposium*, Zaandam, The Netherlands, Sep. 2017

Dynamic borrowing through empirical power priors that control type I error *Central European Network International Biometric Society & International Society of Biopharmaceutical Statistics Conference*, Vienna, Austria, Aug. 2017

Optimal use of sequential trial designs in small populations *FP7 small population research methods workshop - European Medicines Agency*, London, UK, Mar. 2017

An analytical approach to assess the predictive value of biomarkers in Phase II decision making. *Postgraduate Seminar, School of Mathematics, Statistics and Operational Research, University of*

Kent, Kent, UK, Oct. 2013

INTERNATIONAL
PRESENTATIONS -
CONTRIBUTED

Evidence Synthesis Using Bayes Factors *Statistics @ Aegina Conference*, Aegina, Greece, September 2019

Evidence Synthesis Using Bayes Factors *Greek Statistical Institute Conference*, Ioannina, Greece, May 2019

Dynamic borrowing through empirical power priors that control type I error *Eastern Mediterranean Region-International Biometric Society Conference*, Thessaloniki, Greece, May 2017

Dynamic borrowing through empirical power priors that control type I error *Conference of the International Society for Clinical Biostatistics*, Birmingham, UK, Aug. 2016

The role of network meta-analysis in the design of future studies. *Conference of the International Society for Clinical Biostatistics*, Utrecht, the Netherlands, Aug. 2015

On adapting the sample size in a Bayesian clinical trial. *Conference of the International Society for Clinical Biostatistics*, Vienna, Austria, Aug. 2014

A Two-Stage Adaptive design for clinical trials in small populations. *Conference of the International Society for Clinical Biostatistics*, Vienna, Austria, Aug. 2014

Sequential designs in small samples: Evaluation and recommendations *Conference of the International Society for Clinical Biostatistics*, Munich, Germany, Aug. 2013

An analytical approach to assess the predictive value of biomarkers in Phase II decision making. *Conference of the International Society for Clinical Biostatistics*, Munich, Germany, Aug. 2013

Decision making in drug development: Choosing a biomarker for Phase II and predicting the outcome of Phase III. *Clinical Trials Methodology Conference 2011, MRC Network of Hubs for trial methodology research*, Bristol, UK, Oct. 2011

Incorporating a measure of meaningful difference when applying the non-parametric Mann-Kendall test for trend, *11th European Network for Business and Industrial Statistics Conference*, Coimbra, Portugal, Sep. 2011

REVIEWER

f100Research
Research Synthesis Methods
Journal of Biopharmaceutical Statistics (3)
Statistica Neerlandica
British Journal of Mathematical and Statistical Psychology
The Austrian Journal of statistics (2)
Trials (2)
Contemporary Clinical Trials Communications
NWO- Netherlands Organisation for Scientific Research

MEMBERSHIP

Member of the International Society for Clinical Biostatistics (ISCB)
Member of the International Biometric Society (IBS)
Member of the Dutch Society for Statistics and Operational Research (VVS-OR)
Member of the Greek Statistical Institute (ESI)