

PERSONAL INFORMATION

Stefania Manetti

Date of birth | Nationality Italian

WORK EXPERIENCE

January 2020 – Present

Post-doctoral Research Fellow

MeS – Laboratorio Management e Sanità, Sant'Anna School of Advanced Studies
Via S. Zeno 2 - 56127 Pisa (Italy)
www.meslab.santannapisa.it

Research activities

Pre-market and post-marketing Health Technology Assessment (HTA) of medical devices; real world evidence (RWE)

Main responsibilities

- Collaborating with a number of different partners, including clinical staff, patients and technology developers
- Contributing to national and international projects on introduction and post-marketing surveillance of new medical technologies

August 2018 – August 2019

Research Associate in Health Technology Assessment

Health Economics unit of the NIHR London Medical In-Vitro Diagnostic Co-operative (MIC)
Department of Surgery and Cancer, Imperial College London (London, UK)
<http://london.ivd.nihr.ac.uk/>

Research activities

Economic evaluation of medical technologies at different phases of the life cycle, barriers to adoption, clinical pathway mapping, clinical utility and validity, stakeholder analysis, patient/public involvement

Main responsibilities

- Working closely with the Human factor unit of the NIHR London MIC and the extensive clinical networks to support the development and management of cost-effective medical technologies, such as point of care and portable devices
- Collaborating with a number of different partners, including NIHR infrastructures and leading NHS organizations bringing together industry, clinical groups, patients, researchers
- Contributing to interdisciplinary projects including:
 - NHS Test Beds (2018 →) that tests a new set of digital technologies to improve the management of heart failure, chest pain and preeclampsia, funded by NHS England
 - Highland Biosciences (2018 →) that brings a new viscoelastic device to market to help save the lives of trauma accident victims, funded by Innovate UK
 - Accelerated Diagnosis of neuro Endocrine and Pancreatic TumourS (ADEPTS) (2018 →) that aims to develop novel molecular diagnostics for early detection of pancreatic cancer, funded by Pancreatic Cancer UK
 - Medical Device (2018 →) that investigates the barriers to medical device adoption and mitigation strategies, funded by NIHR
- Leading the academic group for the systematic review of the existing within the ADEPTS study

October 2014 – July 2018

Research Assistant in Health Economics

Institute of Management, Sant'Anna School of Advanced Studies (Pisa, Italy)

Research activities

Early and mainstream economic evaluation of medical technologies, design and use of case report forms (CRFs), quantitative data analysis, electronic data capture (EDC)

Main responsibilities

- Contributing to national and international projects including:
 - Health Technology Assessment of the da Vinci Master Slave Manipulator in Italy (2008), funded by the MIUR (Italian Ministry for Universities and Research) through the 2008 PRIN
 - A Modular Smart System for Infants' Rehabilitation At Home based on Mechatronic Toys (CareToy) (2011-2014) that promotes early intervention in preterm babies, funded by the European Commission under the Seventh EU framework programme
 - The CYBERnetic LowEr-Limb CoGnitive Ortho-prothesiS Plus Plus (Cyberlegs ++)
(2017→), funded by the European Commission under the Horizon 2020 EU Framework Programme for Research and Innovation
- Teaching assistant for lectures on economic evaluations in healthcare at the University of Pisa and Sant'Anna School of Advanced Studies
- Web database developer for the collection and management of clinical, organizational and socio-economic data within the Chronic Obstructive Pulmonary Disease (COPD) study
<http://idm.sssup.it/bpco>

January 2013 – March 2013

Research Assistant in Bioinformatics

Department of Engineering IT, University of Pisa (Pisa, Italy)

Main responsibilities

Design and implementation of a toolbox of image processing using the python language to analyse genetic polymorphisms of sea organisms, carried out with the team of marine biologists at the CNR (Italian National Research Council) of Pisa

EDUCATION AND TRAINING

October 2014 – May 2018

Ph.D. in Healthcare Innovation Management (cum Laude)

Institute of Management, Sant'Anna School of Advanced Studies (Pisa, Italy)

Thesis

"Incorporating Health Technology Assessment (HTA) into Medical Device Research and Development: the costs and benefits of being an early bird"

Skills acquired

Research methodologies, systematic reviews, design and use of survey questionnaires, focus groups, interviews, Delphi methodology, advanced statistical analysis, use of statics software (Stata – SPSS)

September 2016 – March 2017

Visiting Scholar

Health Economics Research Center (HERC), University of Oxford (Oxford, UK)

Research activities

Impact of the three main DRG-based hospital costing methods on economic evaluation, cost-effectiveness analysis/model using a large cohort of hip fracture patients in the UK

Skills acquired

Predictive statistics such as bootstrap and Monte Carlo techniques, use and analysis of Hospital Episode Statistics (HES) records and Clinical Practice Research Datalink (CPRD) records

June 5, 2016 – June 18, 2016

Summer School on Methods in Biostatistics and Epidemiology

Cison di Valmarino (Treviso, Italy) - Course directors: Prof M. Pagano and Prof R. Bellocco

Skills acquired

Comparative effectiveness research with longitudinal healthcare databases, use of the Aetion Evidence Generation Platform and R software

February 2016 – May 2016

Ph.D. Visiting Student

Public Health Sciences Department, Karolinska Institutet (Stockholm, Sweden)

Skills acquired

Survival analysis for epidemiologists, methods for qualitative content analysis and interview techniques in health and social care

November 8, 2015

Bayesian Analysis – overview and applications

ISPOR Short Course, Milan (Italy) – Course directors: Prof C. S. Hollenbeak and Prof K. R. Abrams

Skills acquired

Bayesian analysis applied to health economics research, data analysis problems using WinBugs

November 7, 2015

Pharmacoeconomic modelling - applications

ISPOR Short Course, Milan (Italy) – Course directors: Dr S. Corman, Prof M. Roberts, Dr A. Munzer

Skills acquired

Decision analysis tree including Markov models, use of the TreeAge software

January 2011 – April 2014

Master Degree in Biomedical Engineering (110/110 cum Laude)

University of Pisa (Pisa, Italy)

Thesis

“Health Technology Assessment (HTA) of the Da Vinci Master Slave Manipulator in Italy” carried out with the EndoCAS (Center for Computed Assisted Surgery) of University of Pisa and the Institute of Management of Sant’Anna School of Advanced Studies

October 2006 – December 2010

Bachelor Degree in Biomedical Engineering (110/110)

University of Pisa (Pisa, Italy)

Thesis

“Biomechanical model of the ossicular chain of the human middle ear” carried out with the Ear and Neck Unit of Cisanello Hospital in Pisa

PERSONAL SKILLS

Languages

Italian: Native; English: Proficient; French: Basic

Communication skills

I am experienced at working in multidisciplinary, open-minded and multicultural teams and cooperating successfully with different people. I easily adapt to dynamic environments

Organisational / managerial skills

I have an independent, flexible and cooperative approach towards work. I have experience of leading a group of five people from Imperial College London and University of Strathclyde within the ADEPTS study

Digital skills

Good knowledge of the Office package (Word, Excel, Power Point, Access) and several statistical software (Stata – SPSS – TreeAge – Matlab). Knowledge of different programming languages (C++, Python, PHP, HTML, MySQL)

ADDITIONAL INFORMATION

Papers on international peer-reviewed journals

1. Manetti, S.; Turchetti, G.; Fusco, F. (2019). Title: Using Value of Information to determine cost-effectiveness requirements of a health technology in development: a case study on an exoskeleton preventing second hip fractures. Health Economics. Under review.
2. Leal, J., Manetti, S., & Buchanan, J. (2018). The impact of hospital costing methods on cost-effectiveness analysis: a case study. PharmacoEconomics, 36(10), 1263-1272.
3. Manetti, S.; Burns, RM; Turchetti, G. Evidence-gathering across industry and academia on early Health Technology Assessment of medical devices: survey design and piloting. EMBEC & NBC 2017. Springer, Singapore, (2017). 631-634.
4. Turchetti, G.; Pierotti, F.; Palla, I.; Manetti, S.; Freschi, C.; Ferrari, V.; Cuschieri, A. Comparative health technology assessment of robotic-assisted, direct manual laparoscopic and open surgery: a prospective study 543-551 SURGICAL ENDOSCOPY (2017) Volume nr. : 31. Issue nr. : 1
5. Volandri, G; Di Puccio, F; Forte, P; Manetti, S. Model-oriented review and multi-body simulation of the ossicular chain of the human middle ear. Medical engineering & physics (2012), 34(9), 1339-1355

Abstracts on international peer-reviewed journals

1. Manetti, S.; Orsini, N.; Turchetti, G. Early health economic models of new ambient assisted living (AAL) devices for falls prevention. *European Journal of Public Health* (2017). Volume nr. : 27. Issue nr. : 1
2. Manetti, S.; Burns, R.M.; Turchetti, G. Evidence Gathering Across Key Stakeholders Involved In Early Health Technology Assessment. *International Journal of Technology Assessment in Health Care* (2017). Volume nr. : 33. Issue nr. : 1
3. Manetti, S.; Leal, J. The impact of hospital costing methods on economic evaluation. *International Journal of Technology Assessment in Health Care* (2017). Volume nr. : 33. Issue nr. : 1
4. Palla, I.; Lorenzoni, V.; D'Isidoro, C.; Manetti, S.; Porcelli, F.; Turchetti, G. A new organizational integrated home-care model: An Italian pilot study. *VALUE IN HEALTH* (2016). Volume nr. : 19. Issue nr. : 1
5. Manetti, S.; Cecchi, F.; Sgandurra, G.; Cioni, G.; Laschi, C.; Dario, P.; Turchetti, G. Early Stage Economic Evaluation of Caretoy System for Early Intervention In Preterm Infants At Risk of Neurodevelopmental Disorders. *VALUE IN HEALTH* (2015). Volume nr. : 18. Issue nr. : 1
6. Manetti, S.; Palla, I.; Freschi, C.; Cuschieri, A.; Turchetti, G. Health Technology Assessment Needs Information Technology: The Experience From The First Italian Study On The Da Vinci Surgical Robot. *VALUE IN HEALTH* (2015). Volume nr. : 18. Issue nr. : 1
7. Manetti, S.; Turchetti, G. Model-Based Techniques In The Early Phases of The Medical Device Development: A Systematic Literature Review. *A703-A704 VALUE IN HEALTH* (2015). Volume nr. : 18. Issue nr. : 1
8. Turchetti G.; Pierotti F.; Palla I.; Manetti S.; Cuschieri A. The quality of life of patients treated with robotic versus traditional surgery: results from an Italian observational multicenter study. *A538-A538 VALUE IN HEALTH* (2014). Volume nr. : 17. Issue nr. : 1
9. Turchetti, G.; Pierotti F.; Palla, I.; Manetti S.; Cuschieri A. Cost analysis of the robotic surgery in Italy. *A157-A157 VALUE IN HEALTH* (2014). Volume nr. : 17. Issue nr. : 1

Papers presented in international conferences

1. Manetti, S., Hanna, G., Ni, M. Field-testing of Medical Device Key Evidence Tool ('MeDKET'): an evidence-based framework to explain success in selected EU and US enterprises. Paper presented at the Research Afternoon Conference 2018, Business school, South Kensington, Imperial College London (UK) - December 2018
2. Manetti, S., Ni, M., Turchetti, G. Development of Medical Device Key Evidence Tool ('MEDKET'): an evidence based framework to explain device future success in selected European and US companies. Paper presented at the MEMTAB Conference 2018, Utrecht (the Netherlands) - June 2018
3. Volandri, G.; Di Puccio, F.; Forte, P.; Manetti, S. Modellazione multibody dell'orecchio medio umano. Paper presented at the XX Congresso dell'Associazione Italiana di Meccanica Teorica e Applicata, Bologna (Italy) - July 2011

Seminars

- School of Engineering, University of Warwick (Coventry, UK), ABSPIE Seminar Series: "Managing Innovation in BioMedical Engineering: the problems and advantages of starting early" for master and Ph.D. students in Biomedical Engineering – February 2017
https://warwick.ac.uk/fac/sci/eng/research/group/biomedicaleng/abspie/abspie_seminars/
- Health Economics Research Center (HERC), University of Oxford (Oxford, UK), HERC Seminar Series: "Filling the gap between R&D and market access in early HealthTechnology Assessment" for academics and Ph.D. students in health economics – October 2016

Memberships

- Affiliate researcher at the Institute of Management of Sant'Anna School of Advanced Studies (2018 →)
- Member of Health Technology Assessment Division (HTAD) group, International Federation of Medical and Biomedical Engineering (IFMBE) (2016 →)
- President of the Student Chapter of Sant'Anna School, International Society of Pharmacoeconomics and Outcome Research (ISPOR) (2014-2018)

I hereby authorize the use of my personal data in accordance to the gdpr 679/16

Pisa, February 19, 2020

Fto Stefania Manetti