PhD Studentship – Marie Curie ITN program funded

The Marie Curie ITN *Aging Eye* offers the following 10 PhD and 2 Post-Doc positions at the different Academic Institutions and Industry involved. The jobs will begin in February 2014, but expressions of interest should be sent before 23th of October 2013. The gross salary will be according to the Call. The individual research projects are the following and expressions of interest should be sent to the contact email of the interested project:

Project: Crystalline lens response to different optical signals
PhD Position. Applicants should hold a good degree in Optometry.
Host Institution: University of Valencia (Spain)
Objetive: The aim of this project is to have a better understanding of the different optical signals that drive accommodation
Contact email: robert.montes@uv.es(Prof. Robert Montes-Mico)
Project: Age-related changes in the optic of human eye with accommodation
PhD Position. Applicants should hold a good degree in Optometry and Optical Engineering.
Host Institution: University of Manchester (UK)
Objective: The prime objective of the project is to advance our understanding of the changes that occur in the eye's optics with age
Contact email: Hema.Radhakrishnan@manchester.ac.uk

Project: Anatomical and structural changes of the crystalline lens with accommodation and age
PhD Position. Applicants should hold a Master Degree in a relevant field (e.g., physics, optometry, mathematics biomedical engineering, electrical engineering).
Host Institution: Institute of Biomedical Engineering and Instrumentation, Politechnika Wroclawska (Poland)
Objetive: The prime objective of the project is to further our understanding of the human crystalline lens parameters, which appear to change dramatically with age and accommodation
Contact email: robert.iskander@pwr.wroc.pl

Project: Intraocular scattering changes with age
PhD Position. Applicants should hold a good degree in Optometry.
Host Institution: The Rotterdam Ophthalmic Institute (The Netherlands)
Objectives: The aim of this study is to investigate what complaints expressed by the patients are caused by factors related to aging eye, whether they can be (objectively) measured and correlated to complaints expressed by patients
Contact email: n.dorrestijn@eyehospital.nl

Project: Tools for objective measurement the loss of eye transmittance.
Post-DocPosition. Applicants should hold a good PhD in PhD in optoelectronics and strong skills in optics, software development (C++, JAVA), and electronics
Host Institution: Imagine Eyes (France)
Objectives: The goal of the project is to develop tools for the objective measurements of the loss of transparency and the increase of dispersion produced by the aging human eye.
Contact email: contact@imagine-eyes.com and jobs@imagine-eyes.com

Project: Mathematical modelling to alter of depth of focus
PhD Position. Applicants should hold a good degree in Optometry and Optical Engineering.
Host Institution: University of Manchester (UK)
Objective: This project aims to further understand the way in which depth of focus changes with the changes that occur in the crystallinelens during accommodation and with age
Contact email: Hema.Radhakrishnan@manchester.ac.uk

Project: Mathematical models for describing the shape of the human crystalline lens and cornea.
PhD Position. Applicants should hold a Master Degree in a relevant field (e.g., physics, optometry, mathematics biomedical engineering, electrical engineering).
Host Institution: Institute of Biomedical Engineering and Instrumentation, Politechnika Wroclawska (Poland)
Objectives: The project aims to develop a comprehensive model of the anterior eye segment (cornea and lens) that includes the effect of temporal changes in optical microfluctuations, accommodation and age.
Contact email: robert.iskander@pwr.wroc.pl

Project: Objective refraction
PhD Position. Applicants should hold a good degree in in Engineering (optics or biomedical related), Optometry or Physics.
Host Institution: Universidad de Murcia (Spain)
Objectives: The aim of this project is to obtain objective measurements of the refraction and depth of focus of the aging eye.
Contact email: norberto@um.es

Project: Visualsimulation of different optical design
PhD Position. Applicants should hold a good degree in Optometry.
Host Institution: University of Valencia (Spain)
Objective: This project will analyse in vitro the different contact and i traocular lenses available in the market to be able to correct presbyopia using interferometry technology.
Contact email: robert.montes@uv.es(Prof. Robert Montes-Mico)
Project: Intraocular scattering through different optical designs
PhD Position. Applicants should hold a good degree in (Bio)Physics, Biophotonics or Applied Physics.
Host Institution: The Rotterdam Ophthalmic Institute (The Netherlands)
Objective: The aim of this study is to measure IOLs' optical quality both in vivo and in vitro, and to determine sources of increased intraocular scatter in pseudophakic eyes
Contact email: n.dorrestijn@eyehospital.nl

Project: Optical impact of correcting elements
PhD Position. Applicants should hold a good degree in Optometry or Physics
Host Institution: University of Valencia (Spain)
Objetive: The aim of this project is to develop design models and evaluation

criteria through optical simulation to address the visual impact of optical elements and to propose alternatives to current approaches attending these new merit functions.
Contact email: robert.montes@uv.es(Prof. Robert Montes-Mico)
Project: Clinical evaluation of different intraocular and contact lenses.
Post-Doc Position. Applicants should hold a good PhD in VisionScience
Host Institution: Alcon (Switzerland)
Objetive: The goal of the project is to carry out a combined analytical and numerical study of the different clinical protocols (optical- and visual-quality assessment and clinical complications) of contact and intraocular lenses available in the market)
Contact email: robert.montes@uv.es (Prof. Robert Montes-Mico)