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[5] A. Lungu, A. Swift, D. Capener, D. Kielly, D.R. Hose, J. Wild, Diagnosis of Pulmonary Hypertension from MR image based computational models and decision tree analysis, Pulmonary Circulation, vol. 6, pp. 181-190, 2016, indexat in baze de date *ISI Thomson Reuters*

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[8] Swift A., A. Lungu, D.Capener, C. Hammerton, A. Rothman, A. Lawrie, C. Elliot, R. Condliffe, D. Kiely, J. Wild, Age is independently associated with pulmonary arterial compliance in health and in patients with pulmonary vascular disease, European Respiratory Journal, vol 48 (suppl 60), 2016, indexat in baze de date *Google Scholars BDI*

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haemodynamics and decision tree analysis, European Respiratory Journal, vol 46 (suppl 59), 2015, indexat in baze de date *Google Scholars BDI*

[10] A. Swift, A. Lungu, H.Walker, D. Capener, C. Hammerton, C.Elliot, R. Condliffe, D.Kiely, J.Wild, Improved diagnostic accuracy of MRI in patients with suspected pulmonary hypertension with combined right ventricle and pulmonary artery metrics, European Respiratory Journal, vol 46 (suppl 59), 2015, indexat in baze de date *Google Scholars BDI*

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[11] A. Lungu, J. Wild, A. Swift, D.Capener, D. Kielly, D.R. Hose, MRI model-based non-invasive differential diagnosis in pulmonary hypertension, Journal of Biomechanics, vol. 47, iss 12, 2014, pp 2941-2947, 2014, indexat in baze de date *ISI Thomson Reuters (galben)*

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[14] Le Luong, H. Duckles, T. Schenkel, N. Arnold, W. Gsell. A. Lungu,T. Spencer, D.R. Hose, I. Halliday, P. C. Evans, A pharmacological approach to promote shear stress-dependent anti-inflammatory mechanisms in arteries- Arteriosclerosis, Thrombosis, and Vascular Biology, 2014. 34(Suppl 1): p. A258-A258, 2014, indexat in baze de date *Google Scholars BDI*

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[15] A.Turcu, A. Lungu, S. Vlad, D. Rafiroiu, R. Ciupa, V. Diaz, A.J. Narracott, P.V. Lawford, D.R Hose, Closure Mechanics of Mechanical Heart Valve Prostheses - Experimental and Computational Analysis, IFMBE Proceedings vol. 26, pp 363-368, 2009, indexat in baze de date *ISI Thomson Reuters*

TEZA DE DOCTORAT

A. Lungu, MR image based measurement, modelling and diagnostic interpretation of pressure and flow in the pulmonary arteries: applications in pulmonary hypertension, http://etheses.whiterose.ac.uk/12138/, indexat in baze de date *Google Scholars BDI*

PROIECTE INSTITUȚIONALE ȘI DE CERCETARE

Cercetare

Membru în colectivul de cercetare Medical Physics and Academic Radiology al Sheffield

University, UK, 2011-2016:

bursa doctorală din partea EPSRC -The Engineering and Physical Sciences Research Council, UK, 2011-2015
bursa post-doctorală (*Bursary for Clinical Translation to the Sheffield Hospitals Charity*) din partea INSIGNEO- Institute for *in silico* Medicine, UK, 2015

Membru în proiect (19/01.09.2016 P_40-437): Parteneriate pentru transfer de cunoștințe și tehnologie în vederea dezvoltării de circuite integrate specializate pentru creșterea eficienței energetice a noilor generații de vehicule-PartEnerIC, 2018-prezent

Instituționale

Membru în proiect (561894-EPP- 1-2015- 1-DE- EPPKA2-CBHE- JP): Advancing University Education in Biomedical Engineering and Health Management in Kyrgyzstan-KyrMedu, 2017-prezent

Membru în proiect (AG Nr. 39/SGU/NC/1 din 23.11.201): Educaţie şi consiliere în carieră pentru scăderea ratei de abandon la Facultatea de Inginerie Electrică din Cluj-Napoca (EDCONS_FIE), 2017-prezent

LUCRĂRI DE LABORATOR REDACTATE ȘI REALIZATE PRACTIC

Informatică Medicală

1. Lucrul cu variabilă de tip tabel (table) în MATLAB . Salvarea datelor din tabel în fișiere de tip text sau foi de calcul
2. Utilizarea elementelor grafice disponibile în MATLAB GUI (Graphical User Interface)
3. Implementarea unei interfețe grafice utilizator în MATLAB construită pe baza regulilor de inferență a sistemelor expert

Analiza si prelucrarea imaginilor medicale

1. Utilizarea GUIDE MATLAB pentru creerea de aplicaţii destinate procesarii imaginilor medicale