

# PUBLICATIONS LIST

## PhD thesis

**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/>, *Google Scholars BDI*

## ISI/BDI publications

### a. Journal articles (Original Research /Review articles)

1. Kiely, DG; Levin, DL; Hassoun, PM; Ivy, D; Jone, PN; Bwika, J; Kawut, SM; Lordan, J; **Lungu, A**; Mazurek, JA; Moledina, S; Olszewski, H ; Peacock, AJ ; Puri, GD ; Rahaghi, FN ; Schafer, M; Schiebler, M ; Screamton, N; Tawhai, M; van Beek, EJR ; Vonk-Noordegraaf, A; Vandepool, R; Wort, SJ; Zhao, L; Wild, JM ; Vogel-Claussen, J; Swift, AJ, .Statement on imaging and pulmonary hypertension from the Pulmonary Vascular Research Institute (PVRI). **Pulmonary Circulation**. 2019; *ISI*
2. J. Weese; **A. Lungu**; J. Peters, FM. Weber, I. Waechter-Stehle, DR Hose, CFD- and Bernoulli-based pressure drop estimates: A comparison using patient anatomies from heart and aortic valve segmentation of CT images., **Medical physics**, vol. 44, iss: 6, pp:2281-2292, 2017 *ISI (galben)*
3. P. Morris, DA Silva Soto, J Feher, D Rafiroiu, **A. Lungu**, S. Varma, P Lawford, DR Hose, JP Gunn, Fast virtual fractional flow reserve based upon steady-state computational fluid dynamics analysis: results from the VIRTU-Fast study, **JACC: Basic to Translational Science**, vol 2, iss 4, pp: 434-446, 2017, *Scopus BDI*
4. P Morris, A Narracott, H Tengg-Kobligk, DA Silva Soto, S. Hsiao, **A. Lungu**, P. Evans, NW Bressloff, P. Lawford, DR Hose, J. Gunn, Computational fluid dynamics modelling in cardiovascular medicine, **HEART**, vol. 102 , iss: 1, pp: 18-28, 2016, *ISI (rosu)*
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, *ISI*
6. L. Luong , H. Duckles , T. Schenkel , M. Mahmoud , J. L. Lopez-Tremoleda , M. Wylezinska-Arridge, M. Ali , N. P. Bowden, M. Villa-Uriol, K. van der Heiden, R. Xing, F. J. Gijsen, J. Wentzel, A. Lawrie, S. Feng, N. Arnold, W. Gsell, **A. Lungu**, R. Hose, T. Spencer, I. Halliday, V. Ridger , P. C. Evans, Heart rate reduction with ivabradine promotes shear stress-dependent anti-inflammatory mechanisms in arteries, **Thrombosis and Haemostasis**, vol. 116, iss: 1, pp: 181-190, 2016, *ISI (rosu)*
7. **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, *ISI (galben)*
8. J. Peters, **A. Lungu**, F.M.Weber, I.Waechter-Stehle, D.R. Hose, J. Weese, Comparison of CFD-Based and Bernoulli-Based Pressure Drop Estimates across the Aortic Valve Enabled by Shape-Constrained Deformable Segmentation of Cardiac CT Images **Lectures Notes in Computer Science**, v. 8789, 2014, pp 211-219, 2014, *ISI*

## b. Conference publications

1. Rafiroiu, D, Molnar, I, **Lungu, A**, Error Analysis in Patient-Specific Blood Flow Modeling of Coronary Artery Disease, 2019 11<sup>th</sup> International Symposium on Advanced Topics in Electrical Engineering (ATEE), ISSN 1843-8571 *ISI Conference Proceeding*
2. **A. Lungu**, DR Hose, DG Kiely, D. Capener, JM Wild, AJ Swift, Three Element Windkessel Model to Non-Invasively Assess PAH Patients: One Year Follow-up, **International Conference on Advancements of Medicine and Health Care through Technology; 12th - 15th October 2016, Cluj-Napoca, Romania.** IFMBE Proceedings, vol 59. Springer, pp 151-154, 2017, *ISI Conference Proceeding*
3. **A Lungu**, DR. Hose, D. Capener, D. Kielly, J. Wild, A. Swift, Response to treatment assessment in patients with PAH by MRI based computational modelling, **European Respiratory Journal**, vol 48 (suppl 60), 2016 *ISI abstract meeting*
4. 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, *ISI abstract meeting*
5. **A. Lungu**, A. Swift, D. Capener, D. Kielly, D.R. Hose, J. Wild, Diagnosis of pulmonary hypertension from MR image based computational models of pulmonary vascular haemodynamics and decision tree analysis, **European Respiratory Journal**, vol 46 (suppl 59), 2015, *ISI abstract meeting*
6. A. Swift, **A. Lungu**, H.Walker, D. Capener, C. Hammerton, C.Elliott, 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, *ISI abstract meeting*
7. **A. Lungu**, J. Wild, A. Swift, D. Capener, D. Kielly , D.R. Hose, Automatic, simultaneous, non-invasive measurements of flow and area in the human pulmonary arteries from MRI images, **IFMBE Proceedings v. 44, 2014, pp 259-264, 2014, Scopus BDI Conference Proceeding**
8. 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, *Google Scholars BDI*
9. 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, ISI**