

Research outputs

Listing of Research outputs

Personalised biophysical model to optimize left ventricle pacing location for Cardiac Resynchronisation Therapy over time
Lee, A., Sohal, M., Behar, J., Claridge, S., Shetty, A., Jackson, T., Hyde, E., Plank, G., Razavi, R., Lamata, P., Rinaldi, C. A. & Niederer, S., 1 Mar 2017, *Computing in Cardiology*. IEEE Computer Society Press, Vol. 43. p. 757-759 3 p. 7868853
Research output: Chapter in Book/Report/Conference proceeding › Conference paper

Biophysical Modeling to Determine the Optimization of Left Ventricular Pacing Site and AV/VV Delays in the Acute and Chronic Phase of Cardiac Resynchronization Therapy

Lee, A. W. C., Crozier, A., Hyde, E. R., Lamata, P., Truong, M., Sohal, M., Jackson, T., Behar, J. M., Claridge, S., Shetty, A., Sammut, E., Plank, G., Rinaldi, C. A. & Niederer, S., 25 Nov 2016, In : *Journal of Cardiovascular Electrophysiology*.
Research output: Contribution to journal › Article

Optimized Left Ventricular Endocardial Stimulation Is Superior to Optimized Epicardial Stimulation in Ischemic Patients With Poor Response to Cardiac Resynchronization Therapy: A Combined Magnetic Resonance Imaging, Electroanatomic Contact Mapping and Hemodynamic Study to Target Endocardial Lead Placement

Behar, J. M., Jackson, T., Hyde, E., Claridge, S., Gill, J., Bostock, J., Sohal, M., Porter, B., O'Neill, M., Razavi, R., Niederer, S. & Rinaldi, C. A., 22 Jun 2016, In : *JACC: Clinical Electrophysiology*.
Research output: Contribution to journal › Article

Improvement of Right Ventricular Hemodynamics with Left Ventricular Endocardial Pacing during Cardiac Resynchronization Therapy

Hyde, E. R., Behar, J. M., Crozier, A., Claridge, S., Jackson, T., Sohal, M., Gill, J. S., O'Neill, M. D., Razavi, R., Niederer, S. A. & Rinaldi, C. A., 9 May 2016, In : *Pacing and clinical electrophysiology : PACE*.
Research output: Contribution to journal › Article

Effects of Epicardial and Endocardial Cardiac Resynchronization Therapy on Coronary Flow: Insights From Wave Intensity Analysis

Claridge, S., Chen, Z., Jackson, T. A., De Silva, K., Behar, J., Sohal, M., Webb, J., Hyde, E. R., Lumley, M., Asrress, K. N., Williams, R. P. C., Bostock, J., Ali, M., Gill, J., O'Neill, M., Razavi, R., Niederer, S. A., Perera, D. & Rinaldi, C. A., 17 Dec 2015, In : *Journal of the American Heart Association*. 4, 12, e002626.
Research output: Contribution to journal › Article

Mechanistic insights into the benefits of multisite pacing in cardiac resynchronization therapy: The importance of electrical substrate and rate of left ventricular activation

Sohal, M., Shetty, A., Niederer, S., Lee, A., Chen, Z., Jackson, T., Behar, J. M., Claridge, S., Bostock, J., Hyde, E., Razavi, R., Prinzen, F. & Rinaldi, C. A., 1 Dec 2015, In : *Heart rhythm : the official journal of the Heart Rhythm Society*. 12, 12, p. 2449-2457 9 p.
Research output: Contribution to journal › Article

The impact of beat-to-beat variability in optimising the acute hemodynamic response in cardiac resynchronisation therapy

Niederer, S., Walker, C., Crozier, A., Hyde, E. R., Blazeovic, B., Behar, J. M., Claridge, S., Sohal, M., Shetty, A., Jackson, T. & Rinaldi, C., 1 Dec 2015, In : *Clinical Trials and Regulatory Science in Cardiology*. 12, p. 18-22 5 p.
Research output: Contribution to journal › Article

Factors determining the magnitude of the pre-ejection leftward septal motion in left bundle branch block

Remme, E. W., Niederer, S., Gjesdal, O., Russell, K., Hyde, E. R., Smith, N. & Smiseth, O. A., 26 Nov 2015, In : *EUROPACE*. 18, 12, p. 1905-1913
Research output: Contribution to journal › Article

Beneficial Effect on Cardiac Resynchronization from Left Ventricular Endocardial Pacing Is Mediated by Early Access to High Conduction Velocity Tissue: Electrophysiological Simulation Study

Hyde, E. R., Behar, J. M., Claridge, S., Jackson, T., Lee, A. W. C., Remme, E. W., Sohal, M., Plank, G., Razavi, R., Rinaldi, C. A. & Niederer, S. A., 1 Oct 2015, In : *Circulation-Arrhythmia And Electrophysiology*. 8, 5, p. 1164-1172 9 p.
Research output: Contribution to journal › Article

Measurement and modeling of coronary blood flow

Sinclair, M., Lee, J., Cookson, A. N., Rivolo, S., Hyde, E. R. & Smith, N. P., 2015, In : *Wiley interdisciplinary reviews. Systems biology and medicine*.

Research output: Contribution to journal › Article

Multiscale Modelling of Cardiac Perfusion

Lee, J., Cookson, A., Chabiniok, R., Rivolo, S., Hyde, E., Sinclair, M., Michler, C., Sochi, T. & Smith, N., 2015, (Accepted/In press) *Modeling the Heart and the Circulatory System*. Springer, p. 51-96

Research output: Chapter in Book/Report/Conference proceeding › Chapter

A spatially-distributed computational model to quantify behaviour of contrast agents in MR perfusion imaging

Cookson, A., Lee, J., Michler, C., Chabiniok, R., Hyde, E., Nordsletten, D. & Smith, N., Oct 2014, In : *Medical Image Analysis*. 18, 7, p. 1200-1216 17 p.

Research output: Contribution to journal › Article

Multi-Scale Parameterisation of a Myocardial Perfusion Model Using Whole-Organ Arterial Networks

Hyde, E. R., Cookson, A. N., Lee, J., Michler, C., Goyal, A., Sochi, T., Chabiniok, R., Sinclair, M., Nordsletten, D. A., Spaan, J., van den Wijngaard, J. P. H. M., Siebes, M. & Smith, N. P., Apr 2014, In : *Annals of Biomedical Engineering*. 42, 4, p. 797-811 15 p.

Research output: Contribution to journal › Article

Myocardial perfusion distribution and coronary arterial pressure and flow signals: clinical relevance in relation to multiscale modeling, a review

Nolte, F., Hyde, E. R., Rolandi, C., Lee, J., van Horssen, P., Asrress, K., van den Wijngaard, J. P. H. M., Cookson, A. N., van de Hoef, T., Chabiniok, R., Razavi, R., Michler, C., Hautvast, G. L. T. F., Piek, J. J., Breeuwer, M., Siebes, M., Nagel, E., Smith, N. & Spaan, J. A. E., Nov 2013, In : *Medical and Biological Engineering and Computing*. 51, 11, p. 1271-1286 16 p., N/A.

Research output: Contribution to journal › Literature review

Parameterisation of multi-scale continuum perfusion models from discrete vascular networks

Hyde, E. R., Michler, C., Lee, J., Cookson, A. N., Chabiniok, R., Nordsletten, D. A. & Smith, N. P., May 2013, In : *Medical and Biological Engineering and Computing*. 51, 5, p. 557-570 14 p., N/A.

Research output: Contribution to journal › Article

A computationally efficient framework for the simulation of cardiac perfusion using a multi-compartment Darcy porous-media flow model

Michler, C., Cookson, A. N., Chabiniok, R., Hyde, E., Lee, J., Sinclair, M., Sochi, T., Goyal, A., Viguera, G., Nordsletten, D. A. & Smith, N. P., Feb 2013, In : *International Journal For Numerical Methods In Biomedical Engineering*. 29, 2, p. 217-232 16 p.

Research output: Contribution to journal › Article

The above report is produced using the following setup

Ordered by: null