

IRSES eTIME Publication List:

Last modified by: BB 27/1/17

Totals: 327 total articles, comprising: 114 journal articles (14 invited) and 213 conference articles/abstracts (44 invited; 5 Best Paper Awards; 1 invited Plenary Talk):

- **2016:** 50 journal articles (5 invited) and 53 conference articles/abstracts (6 invited; 2 Best Paper Award)
- **2015:** 24 journal articles (0 invited) and 79 conference articles/abstracts (17 invited; 1 Best Paper Award; 1 Plenary Talk)
- **2014:** 25 journal articles (6 invited) and 54 conference articles/abstracts (18 invited; 2 Best Paper Awards)
- **2013:** 15 journal articles (3 invited) and 27 conference articles/abstracts (3 invited)

Organisation: Publications are organised by research area of the three core objective projects (COPs) consisting of:

- **CVS:** Cardiovascular Systems
- **GC:** Glycemic Control (and metabolism)
- **MV:** Mechanical Ventilation (and pulmonary mechanics)

Each COP has its own listing and each listing is broken into journal and conference publications. These sections commence on the following pages in the order above.

All articles are in collaborative work and/or involve researchers who were on or were exchanged via this grant and are organised by COP areas. They all were published starting in 2013 onward from the commencement of eTIME.

CVS: Cardiovascular Systems

Journal Articles: 13 total; (3 invited)

1. Safaei, S, Ladd, D, Bradley, CP, Suresh, V, Mithraratne, Muller, A, Ho, H, Hellevik, FR, Onholt, SW, Chase, JG, Muller, LO, Watanabe, SM, Blanco, PJ, de Bono, B and Hunter, PJ (2016). "Roadmap for Cardiovascular Circulation Model," *Journal of Physiology* Vol 594(23), pp. 6909-6928, ISSN: 14697793, doi: 10.1113/JP272660.
2. Pironet, A, Dauby, PC, Chase, JG, Docherty, PD, Revie, JA and Desaive, T (2016). "Structural Identifiability Analysis of a Cardiovascular System Model," *Medical Engineering & Physics*, Vol 38(5), pp. 433-441, ISSN: 1350-4533, doi: 10.1016/j.medengphy.2016.02.005.
3. Khan, M, Pretty, CG, Amies, AC, Elliott, R, Chiew, YS, Shaw, GM and Chase, JG (2016). "Analysing the Effects of Cold, Normal, and Warm Digits on Transmittance Pulse Oximetry," *Biomedical Signal Processing and Control (BSPC)*, Vol 26, pp. 34-41, ISSN: 1746-8094, doi: 10.1016/j.bspc.2015.12.006.
4. Pironet, A, Desaive, T, Chase, JG, Morimont, P and Dauby, PC (2015). "Model-based computation of total stressed blood volume from a preload reduction manoeuvre," *Mathematical Biosciences*, Vol 265, pp. 28-39, ISSN: 0025-5564, doi: 10.1016/j.mbs.2015.03.015.
5. Morimont, P, Guiot, J, Desaive, T, Tchana-Sato, V, Janssen, N, Caqina, A, Hella, D, Blaffart, F, Defraigne, JO and Lambermont, B (2015). "Acta Anaesthesiologica Scandinavica," Vol 59(4), p. 448-56. doi: 10.1111/aas.12497
6. Morimont P, Pironet A, Desaive T, Chase G and Lambermont B (2015). "Re: Chung et al.'s Letter to the Editor in response to: Early detection of abnormal left ventricular relaxation in acute myocardial ischemia with a quadratic model," *Medical Engineering & Physics*, Vol 37(8), pp. 827, ISSN: 1350-4533, doi: 10.1016/j.medengphy.2015.05.001.
7. Morimont, P, Lambermont, B, Pironet, A, Chase, JG and Desaive, T (2014). "Early detection of abnormal left ventricular relaxation in acute myocardial ischemia with a quadratic model," *Medical Engineering & Physics*, Vol 36(9), pp. 1101-1105, doi: 10.1016/j.medengphy.2014.06.001, ISSN: 1350-4533.
8. Kamoi, S, Pretty, CG, Docherty, PD, Squire, D, Revie, JA, Chiew, YS, Desaive, T, Shaw, GM and Chase, JG (2014). "Continuous stroke volume estimation from aortic pressure using zero dimensional aortic model," *PLOS ONE, Public Library of Science*, Vol. 9(7): e102476, eISSN: 1932-6203, doi: 10.1371/journal.pone.0102476.
9. Pironet, A, Dauby, PC, Paeme, S, Kosta, S, Chase, JG and Desaive, T (2013). "Simulation of left atrial function using a multi-scale model of the cardiovascular system," *PLOS ONE, Public Library of Science*, accepted April 2013, eISSN: 1932-6203, DOI: 10.1371/journal.pone.0065146
10. Revie, JA, Stevenson, D, Chase, JG, Pretty, CG, Lambermont, BC, Ghuysen, A, Kolh, P, Shaw, GM and Desaive, T (2013). "Evaluation of a Model-Based Hemodynamic Monitoring Method in a Porcine Study of Septic Shock," *Computational and Mathematical Methods in Medicine*, Volume 2013, Article ID:505417, 17-pages,. doi:10.1155/2013/505417, ISSN: 1748-670X (open access)
11. Desaive, T, Lambermont, B, Janssen, N, Ghuysen, A, Kolh, P, Morimont, P, Dauby, PC, Starfinger, C, Shaw, GM and Chase, JG (2013). "Assessment of ventricular contractility and ventricular-arterial coupling with a model-based sensor," *Computer Methods and Programs in Biomedicine*, Vol 109(2), pp. 182-189, ISSN: 0169-2607 (**invited**).
12. Moorhead, KT, Paeme, S, Chase, JG, Kolh, P, Pierard, L, Hann, CE, Dauby, PC and Desaive, T (2013). "A Simplified Model for Mitral Valve Dynamics," *Computer Methods and Programs in Biomedicine*, Vol 109(2), pp. 190-196, ISSN: 0169-2607 (**invited**).
13. Revie, JA, Stevenson, DJ, Chase, JG, Hann, CE, Lambermont, B, Ghuysen, A, Kolh, P, Shaw, GM, Heldmann, S and Desaive, T (2013). "Validation of Subject-Specific Cardiovascular System Models from Porcine Measurements," *Computer Methods and Programs in Biomedicine*, Vol 109(2), pp. 197-210, ISSN: 0169-2607 (**invited**)

Conference Articles: 38 total; (10 invited, 1 invited plenary)

1. Shaw, GM, Khan, M, Amies, A, Pretty, CG, Balmer, J and Chase, JG (2016). "Non-Invasive Real-Time Venous Oxygenation Saturation" 41st ANZICS/ACCN Intensive Care Annual Scientific Meeting, Perth, Australia, October 20-22, 1-page.
2. Morimont, M, Habran, S, Hubert, R, Desaive, T, Blaffart, F, Janssen, N, Guiot, J, Pironet, A, Dauby, PC and Lambermont, B (2016). "Effect of citrate anticoagulation on CO2 extraction during low flow extracorporeal veno-venous CO2 removal therapy," European Society of Intensive Care Medicine (ESICM) 2016, Milan, Italy, October 1-5, 1-page, published in: Intensive Care Medicine Experimental, Vol 4(Suppl 1), pp. A46.
3. Khan, M, McKenzie, LR, Amies, A, Pretty, CG, Shaw, GM and Chase, JG (2016). "Monitoring peripheral blood flow change using transmission Photoplethysmography sensor," 12th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2016), Auckland, NZ, August 29-31, 6-pages, doi:
4. Pironet, A, Dauby, PC, Chase, JG, Morimont, P, Janssen, N, Lambermont, B, Davidson, S and Desaive, T (2016). "A Comparison between Four Techniques to Measure Cardiac Output," 38th IEEE Engineering in Medicine and Biology Conference (IEEE EMBC), Orlando, FL, August 16-20, 4-pages, doi: 10.1109/EMBC.2016.7591291.
5. Davidson, S, Pretty, CG, Kamoi, S, Balmer, J and Chase, JG (2016). "A simple, relatively non-invasive method for the identification of Ventricular Dead Space Volume," Medtech CoRE Conference, Auckland, NZ, June 20, 2-pages.
6. Balmer, J, Pretty, CG, Kamoi, S and Chase, JG (2016). "ECG and its suitability for measuring changes in Pulse Wave Velocity," Medtech CoRE Conference, Auckland, NZ, June 20, 2-pages.
7. Pironet, A, Dauby, PC, Morimont, P, Janssen, N, Chase, JG, Davidson, SM and Desaive, T (2016). "Model-Based Decision Support Algorithm to Guide Fluid Resuscitation," 4th IFAC International Conference on Intelligent Control and Automation Sciences (ICONS 2016), Reims, France, June 1-3, 4-pages, doi: 10.1016/j.ifacol.2016.07.117 (**invited**).
8. Pironet, A, Morimont, P, Dauby, PC, Chase, JG and Desaive, T (2016). "Parameter correlation analysis in four mathematical models of left ventricular relaxation," Belgian National Bio-Engineering Day, March 4, Brussels, Belgium, 1-page.
9. De Bournonville, S, Pironet, A, Pretty, CG, Chase, JG and Desaive, T (2015). "Cardio-Pulmonary mechanics and minimal modelling in critical care," Belgian National Bio-Engineering Day, March 4, Brussels, Belgium, 1-page.
10. Chase, JG, Desaive, T, Benyo, B and Moeller, K for the eTIME Consortia (2015). "Better Care and Better Productivity: the role of model-based therapeutics in mitigating the destructive convergence of rising demographics and cost," IEEE EMBS Benelux Bi-Annual Conference, Nov 26-27, Liege, Belgium, 1-page (**invited plenary**).
11. Pironet, A, Morimont, P, Dauby, PC, Chase, JG and Desaive, T (2015). "Parameter correlation analysis in four mathematical models of left ventricular relaxation," IEEE EMBS Benelux Bi-Annual Conference, Nov 26-27, Liege, Belgium, 1-page.
12. De Bournonville, S, Pironet, A, Pretty, CG, Chase, JG and Desaive, T (2015). "Cardio-Pulmonary mechanics and minimal modelling in critical care," IEEE EMBS Benelux Bi-Annual Conference, Nov 26-27, Liege, Belgium, 1-page.
13. Szilágyi, L., Lefkovits, L., Iantovics, B., Iclănzan, D., and Benyó, B. (2015, November). "Automatic Brain Tumor Segmentation in Multispectral MRI Volumetric Records," 22nd International Conference. Istanbul, Nov 9-12, Turkey, pp. 174-181, in: Neural Information Processing: Springer International Publishing. doi: 10.1007/978-3-319-26561-2_21
14. Morimont, P, Massion, P, Hans, G, Guiot, J, Desaive, T, Pironet, A and Lambermont, B (2015). "Reliable Evaluation Of Left Ventricular Function During Veno-Arterial Extracorporeal Membrane Oxygenation," 28th Annual Congress of the European Society of Intensive Care Medicine (ESICM 2015), Berlin, Germany, October 3-7, 1-page, in: Intensive Care Medicine Experimental 2015, 3(Suppl 1):A541, doi: 10.1186/2197-425X-3-S1-A541
15. Morimont, P., Guiot, J., Desaive, T., Defraigne, J.O. and Lambermont, B (2015). "Effects of veno-venous extracorporeal CO2 removal on pulmonary hypertension in an ARDS model," European Respiratory Society Annual Congress, Amsterdam, Netherlands, Sept 26-30, 1-page, in: European Respiratory Journal, 46(suppl 59), p.OA4474, doi: 10.1183/13993003.congress-2015.OA4474.
16. Morimont, P., Guiot, J., Desaive, T., Defraigne, J.O. and Lambermont, B (2015). "Effects of veno-venous extracorporeal CO2 removal on pulmonary hypertension in an ARDS model," European

Respiratory Society Annual Congress, Amsterdam, Netherlands, Sept 26-30, 1-page, in: European Respiratory Journal, 46(suppl 59), p.OA4474, doi: 10.1183/13993003.congress-2015.OA4474.

17. Khan, M, Pretty, CG, Amies, AC, Elliott, RB, Shaw, GM and Chase, JG (2015). "Investigating the effect of temperature on Photoplethysmography," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.166 (**invited**)
18. Pironet, A, Dauby, PC, Chase, JG, Kamoi, S, Janssen, N, Morimont, P, Lambermont, B and Desaive, T (2015). "Model-based stressed blood volume is an index of fluid responsiveness," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.154 (**invited**)
19. Pironet, A, Desaive, T, Dauby, PC, Chase, JG and Docherty, PD (2015). "Parameter Identification Methods in a Model of the Cardiovascular System," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.167.
20. Davidson, SM, Kannangara, DO, Pretty, CG, Kamoi, S, Desaive, T and Chase, JG (2015). "A Novel Approach for Deriving a Patient Specific Beat-to-Beat Estimate of the Cardiac Driver Function," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.164 (**invited**)
21. Kamoi, S, Pretty, CG, Chiew, YS, Davidson, SM, Pironet, A, Desaive, T, Shaw, GM and Chase, JG (2015). "Relationship between stroke volume and pulse wave velocity," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.153 (**invited**)
22. Habran, S, Dauby, PC, Desaive, T, Morimont, P and Lambermont, B (2015). "Mathematical modeling of extracorporeal CO₂ removal," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, 6-pages
23. Kannangara, DO, Davidson, SM, Pretty, CG, Kamoi, S, Corbett, J, Desaive, T, Shaw, GM and Chase, JG (2015). "An Assessment of the Relationship between Dicrotic Notch timing and Cardiac Preload," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, pp. 1001 - 1004, doi: 10.1109/EMBC.2015.7318533
24. Davidson, SM, Kannangara, DO, Pretty, CG, Kamoi, S, Pironet, A, Desaive, T, and Chase, JG (2015). "Modelling of the Nonlinear End-Systolic Pressure-Volume Relation and Volume at Zero Pressure in Porcine Experiments," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, pp. 6544 - 6547, doi: 10.1109/EMBC.2015.7319892.
25. Kamoi, S, Pretty, CG, Chiew, YS, Pironet, A, Davidson, S, Desaive, T, Shaw, GM and Chase, JG (2015). "Stroke Volume Estimation using Aortic Pressure Measurements and Aortic Cross Sectional Area: Proof of Concept," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, pp. 1005 - 1008, doi: 10.1109/EMBC.2015.7318534
26. Chase, JG, Shaw, GM, Signal, MK, Pretty, CG, Rodgers, GW, Benyo, B, Moeller, K and Desaive, T (2015). "Teaching old electronics, new tricks: medical applications of well-known industrial electronics," 10th IEEE Conference on Industrial Electronics and Applications (ICIEA 2015), Auckland, NZ, June 15-17, 1-page, ISSN: 2158-2297 (**invited, Distinguished Invited Lecture**).
27. Szilágyi, L. (2015). "A Unified Theory of Fuzzy c-Means Clustering Models with Improved Partition." 12th International Conference on Fuzzy Systems and Knowledge Discovery, Shanghai, China, August 15-17, 11-pages. In: Modeling Decisions for Artificial Intelligence (pp. 129-140). Springer International Publishing. doi: 10.1007/978-3-319-23240-9_11
28. Kamoi, S, Pretty, CG, Davidson, SM, Chiew, YS, Balmer, J, and Chase, JG (2015). "Novel Stroke Volume Estimation Method from Aortic Pressure Measurements and Aortic Diameter" MedTech CoRE Annual Conference, Auckland, New Zealand, June 15, 1-page.
29. Pironet, A, Morimont, P, Kamoi, S, Janssen, N, Dauby, PC, Chase, JG, Lambermont, B and Desaive, T (2015). "The relation between global end-diastolic volume and left ventricular end-diastolic volume" 35th International Symposium on Intensive Care and Emergency Medicine (ISICEM), Brussels, Belgium, March 16-18, 1-page
30. Pironet, A, Dauby, PC, Chase, JG and Desaive, T (2014). "Tracking Stressed Blood Volume During Vascular Filling Experiments," 13th Belgian Day On Biomedical Engineering, November 28, Brussels, Belgium, 1-page.
31. Kamoi, S, Pretty, CG, Chiew, YS, Pironet, A, Desaive, T, Shaw, GM and Chase, JG (2014). "Estimating Ventricular Stroke Work From Aortic Pressure Waveform," 13th Belgian Day On Biomedical Engineering, November 28, Brussels, Belgium, 1-page.

32. Kamoi, S, Chiew, YS, Pretty, CG, Pironet, A, Desaive, T and Chase, JG (2014). "Estimating Relative Change in Ventricular Stroke Work from Aortic Pressure Alone: Proof of Concept Study," 48th German Society for Biomedical Engineering Conference (BMT 2014), October 8-10, Hannover, Germany, 4-pages.
33. Pironet, A, Desaive, T, Chase, JG, Morimont, P and Dauby, PC (2014). "Model-Based Computation of Total Stressed Blood Volume from a Preload Reduction Experiment," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.00548 (**invited**).
34. Pironet, A, Dauby, PC, Chase, JG, Revie, JA, Docherty, PD and Desaive, T (2014). "Structural Identifiability Analysis of a Cardiovascular System Model," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.00549 (**invited**).
35. Kamoi, S, Squire, D, Revie, JA, Pretty, CG, Docherty, PD, Chiew, YS, Desaive, T, Shaw, GM and Chase, JG (2014). "Accuracy of Stroke Volume Estimation via Reservoir Pressure Concept and Three Element Windkessel Model," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.01104 (**invited**).
36. Pironet, A, Dauby, PC, Revie, JA, Chase, JG and Desaive, T (2013). "A new method for computing the derivatives of the mean and amplitude of physiological variables with respect to the parameters of a cardiovascular system model," 25th International Conference of the Society for Medical Innovation and Technology (SMIT 2013), Sept 5-7, Baden-Baden, Germany, 1-page (**invited IFAC session**).
37. Pironet, A, Dauby, PC, Kosta, S, Paeme, S, Chase, JG, Kolh, P and Desaive, T (2013). "Effect of abrupt preload reduction on left atrial and ventricular pressures in a multi-scale mathematical model of the cardiovascular system," European Society of Cardiology Congress (ESC 2013), 31 August – 4 September, Amsterdam, Netherlands, 1-page.
38. Kamoi, S, Chase, JG, Docherty, PD, and Desaive, T (2013). "Cost-effective hemodynamic monitoring of critically ill patients via model-based analysis of aortic pressure measurements," Health Research Society of Christchurch HRSC 2013 Grand Round Series, Christchurch, May 10, 1-page (also in NZ Medical Journal)

GC: Glycemic Control (and metabolic systems)

Journal Articles: 33 total; (8 invited)

1. Suhaimi, F, Chase, JG, Pretty, CG, Shaw, GM, Razak, NN and Jamludin, U (2017). "Insulin sensitivity and sepsis score: A correlation between model-based metric and sepsis scoring system in critically ill patients," *Biomedical Signal Processing and Control (BSPC)*, Vol 32, pp. 112-123, ISSN: 1746-8094, doi: 10.1016/j.bspc.2016.08.005 (**invited**)
2. Thomas, F, Pretty, CG, Signal, MK and Chase, JG (2017). "Accuracy and Performance of Continuous Glucose Monitors in Athletes," *Biomedical Signal Processing and Control (BSPC)*, Vol 32, pp. 124-129, ISSN: 1746-8094, doi: 10.1016/j.bspc.2016.08.007 (**invited**)
3. Benyo, B, Tsuzuki, M and Simanski, O. (2017). "Introduction: Special Edition on Biological and Medical Systems" *Biomedical Signal Processing and Control*, Vol 32, pp. 110-111 (**invited**).
4. Mansell, E, Docherty, PD and Chase, JG (2017). "Shedding light on grey noise in diabetes modelling," *Biomedical Signal Processing and Control (BSPC)*, Vol 31, pp. 16-30, ISSN: 1746-8094, doi: 10.1016/j.bspc.2016.06.007.
5. Sah Pri, A, Chase, JG, Pretty, CG, Shaw, GM, Preiser, JC, Taccone, F, Penning, S and Desaive, T (2016). "Stochastic modelling of insulin sensitivity for out of hospital cardiac arrest patients treated with hypothermia," *J. of Biological Sciences*, Vol 16(7), pp. 256-264. doi:10.3923/jbs.2016.256.264
6. Thomas, F, Pretty, CG, Desaive, T and Chase, JG (2016). "Blood Glucose Levels of Sub-Elite Athletes during 6-days of Free Living," *Journal of Diabetes Science and Technology (JoDST)*, Vol 10(6), pp. 1335-1343, ISSN: 1932-2968, doi: 10.1177/1932296816648344
7. Fisk, L, Docherty, PD, Pretty, CG and Chase, JG (2106). "Incorporating bolus and infusion pharmacokinetics into the ICING Insulin Model," *Mathematical Bioscience*, Vol 281, pp. 1-8, ISSN: 0025-5564, doi: 10.1016/j.mbs.2016.08.005.
8. Preiser, JC, Chase, JG, Hovorka, R, Joseph, JI, Krinsley, JS, De Block, C, Desaive, T, Foubert, L, Kalfon, P, Pielmeier, U, Van Herpe, T and Wenerman, J (2016). "Glucose Control in the ICU: A Continuing Story," *Journal of Diabetes Science and Technology*, Vol 10(6), pp. 1372–1381, ISSN: 1364-8535, doi: 10.1177/1932296816648713.
9. Thomas, F, Smith, G, Lu, J, Babor, R, Booth, M, Beban, G, Chase, JG and Murphy, R (2016). "Differential acute impacts of sleeve gastrectomy, Roux-en-Y gastric bypass surgery and matched caloric restriction diet on insulin secretion, insulin effectiveness and non-esterified fatty acid levels among patients with type 2 diabetes," *Obesity Surgery*, Vol 26(8), pp. 1924-31, ISSN: 0960-8923, doi: 10.1007/s11695-015-2038-3.
10. Benyó, B (2016). "Informatikai technológiák alkalmazása az orvoslásban, Híradástechnika, Vol 71(HTE INFOKOM 2016), pp. 23-29. (in Hungarian)
11. Chase, JG, Desaive, T and Preiser, JC (2016). "Virtual patients and virtual cohorts: a new way to think about the design and implementation of personalised ICU treatments," *Annual Update in Intensive Care and Emergency Medicine*, Springer Pub, Ed: JL Vincent, pp. 435-448, ISBN: 978-3-319-27349-5, doi: 10.1007/978-3-319-27349-5_35 (**invited**).
12. Stewart, K, Pretty, CG, Tomlinson, H, Thomas, FL, Shaw, GM, Benyo, B, Homlok, J, Illyes, A, Szabo Nemedi, N and Chase, JG (2016). "Safety, Efficacy and Clinical Generalization of the STAR Protocol: A Retrospective Analysis," *Annals of Intensive Care*, Vol 6:24, 12-pages, ISSN: 2110-5820, doi: 10.1186/s13613-016-0125-9.
13. Dickson, JL, Alsweiler, J, Gunn, CA, Pretty, CG and Chase, JG (2016). "A C-peptide based model of pancreatic insulin secretion in extremely preterm neonates in intensive care," *Journal of Diabetes Science and Technology (JoDST)*, Vol 10(1), pp. 111-118, doi: 10.1177/1932296815596175, ISSN: 1932-2968.
14. Penning, S, Pretty, CG, Preiser, JC, Shaw, GM, Chase, JG and Desaive, T (2015). "Glucose control positively influences patient outcome: a retrospective study," *Journal of Critical Care*, Vol 30(3), pp. 455-459, ISSN: 0883-9441, doi: 10.1016/j.jcrc.2014.12.013.
15. Stewart, KW, Pretty, CG, Tomlinson, H, Fisk, L, Shaw, GM and Chase, JG (2015). "Stochastic Model Predictive (STOMP) Glycemic Control," *Biomedical Signal Processing & Control (BSPC)*, Vol 16(1), pp. 61-67, ISSN: 1746-8094, doi: 10.1016/j.bspc.2014.09.011.
16. Thomas, F, Signal, MK and Chase, JG (2015). "Using Continuous Glucose Monitoring Data and Detrended Fluctuation Analysis to Determine Patient Condition: A Review," *Journal of Diabetes Science and Technology (JoDST)*, Vol 9(6), pp. 1327-1335, doi: 10.1177/1932296815592410, ISSN: 1932-2968.

17. Mansell, EJ, Docherty, PD, Fisk, L and Chase, JG (2015). "Estimation of secondary effect parameters in glycaemic dynamics using accumulating data from a virtual type 1 diabetic patient," *Mathematical Biosciences*, Vol 266, pp. 108-117, doi:10.1016/j.mbs.2015.06.002, ISSN: 0025-5564.
18. Othman, NA, Docherty, PD, Krebs, JD, Bell, DA and Chase, JG (2015). "The necessity of identifying the basal glucose set-point in the IVGTT for patients with Type 2 Diabetes," *BioMedical Engineering OnLine*, (open access), Vol 14:18, 10-pages, ISSN: 1475-925X, doi: 10.1186/s12938-015-0015-7.
19. Dickson, JL, Chase, JG, Pretty, CG, Gunn, CA and Alsweller, JA (2015). "Hyperglycaemic preterm babies have sex differences in insulin secretion," *Neonatology*, Vol 108(2), pp. 93-98, ISSN: 1661-7800, doi: 10.1159/000381206.
20. Sah Pri, A, Pretty, CG, Shaw, GM, Preiser, JC, Taccone, FS, Oddo, M, Vincent, JL, Penning, S, Desaive, T and Chase, JG (2014). "Evolution of Insulin Sensitivity and its Variability in Out of Hospital Cardiac Arrest (OHCA) Patients treated with Hypothermia," *Critical Care*. [open access](#), Vol 18:586, ISSN: 1364-8535, doi: 10.1186/s13054-014-0586-x.
21. Davidson, SM, Docherty, PD and Chase, JG (2014). "Use of the DISST Model to estimate the HOMA and Matsuda Indexes using only a Basal Insulin Assay," *Journal of Diabetes Science and Technology (JoDST)*, Vol 8(4), pp. 815-820, ISSN: 1932-2968, doi: 10.1177/1932296814532490.
22. Gunn, CA, Dickson, JL, Alsweller, JA, Harding, JE and Chase, JG (2014). "The Use of Brain Mass Estimation and Central Nervous System Glucose Uptake in Neonatal Glycaemic Modeling and Control," *Computer Methods and Programs in Biomedicine*, Vol 115(2), pp. 47-54, ISSN: 0169-2607, doi: 10.1016/j.cmpb.2014.03.006.
23. Shaw, GM, Pretty, CG and Chase, JG (2014). "Letter on Kalfon et al: It's how you do it," *Intensive Care Medicine*, Vol 40(6), pp. 922, doi: 10.1007/s00134-014-3302-z, ISSN: 0342-4642.
24. Pretty, CG, LeCompte, AJ, Penning, S, Fisk, L, Shaw, GM, Desaive, T and Chase, JG (2014). "Interstitial insulin kinetic parameters for a 2-compartment insulin model with saturable clearance," *Computer Methods and Programs in Biomedicine*, Vol 114(3), pp. e39-e45, ISSN: 0169-2607, doi: 10.1016/j.cmpb.2014.01.011 (**invited**).
25. Pretty, CG, Signal, MK, Fisk, L, Penning, S, LeCompte, AJ, Shaw, GM, Desaive, T and Chase, JG (2014). "Impact of sensor and measurement timing errors on model-based insulin sensitivity," *Computer Methods and Programs in Biomedicine*, Vol 114(3), pp. e79-e86, ISSN: 0169-2607, doi: 10.1016/j.cmpb.2013.08.007 (**invited**).
26. Penning, S, Chase, JG, Preiser, J-C, LeCompte, AJ, Signal, M, Melot, C and Desaive, T (2014). "Does the achievement of an intermediate glycemic target reduce organ failure and mortality? A post-hoc analysis of the Glucontrol Trial," *Journal of Critical Care*, Vol 29(3), pp. 374-379, ISSN: 0883-9441, doi: 10.1016/j.jcrc.2014.01.013.
27. Thomas, F, Pretty, CG, Fisk, L, Shaw, GM, Chase, JG and Desaive, T (2014). "Reducing the Impact of Insulin Sensitivity Variability on Glycaemic Outcomes Using Separate Stochastic Models," *BioMedical Engineering OnLine*, (open access), Vol 13(43), 10-pages, doi:10.1186/1475-925X-13-43, ISSN: 1475-925X.
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31. Pretty, CG, LeCompte, AJ, Penning, S, Fisk, L, Shaw, GM, Desaive, T and Chase, JG (2014). "Interstitial insulin kinetic parameters for a 2-compartment insulin model with saturable clearance," *Computer Methods and Programs in Biomedicine*, Vol 114(3), pp. e39-e45, ISSN: 0169-2607, doi: 10.1016/j.cmpb.2014.01.011 (**invited**).
32. Pretty, CG, Signal, MK, Fisk, L, Penning, S, LeCompte, AJ, Shaw, GM, Desaive, T and Chase, JG (2014). "Impact of sensor and measurement timing errors on model-based insulin sensitivity," *Computer Methods and Programs in Biomedicine*, Vol 114(3), pp. e79-e86, ISSN: 0169-2607, doi: 10.1016/j.cmpb.2013.08.007 (**invited**).

33. Chase, JG, Benyo, B, Desai, T, Fisk, L, Dickson, JL, Penning, S, Signal, MK, Illyes, A, Szabo-Nemedi, N and Shaw, GM (2013). "Uncertainty, Safety and Performance: A generalisable approach to risk-based (therapeutic) decision making," in: Medical Applications of Artificial Intelligence, published: November 11, 2013 by CRC Press, Chapter 15, pp. 233-246, ISBN: 1439884331, DOI: 10.1201/b15618-16

Conference Articles: 78 total; (21 invited; 2 Best Paper Award)

1. Uyttendaele, V, Dickson, JL, Stewart, KW, Shaw, GM, Desai, T and Chase, JG (2016). "When NICE is Not Nice: Performance of Two ICU Glycaemic Control Protocols," 16th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, November 10-12, 1-page.
2. Stewart, KW, Chase, JG, Dickson, JL, Pretty, CG and Shaw, GM (2016). "Can we fix it? Yes we can! Simplifying nutrition in STAR Glycemic Control," 16th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, November 10-12, 1-page.
3. Stewart, KW, Dickson, JL, Pretty, CG, Shaw, GM and Chase, JG (2016). "Variability is a constant! Insulin sensitivity and its variability in 4 ICU Cohorts," 16th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, November 10-12, 1-page.
4. Uyttendaele, V, Dickson, JL, Stewart, KW, Shaw, GM, Desai, T and Chase, JG (2016). "Are Survivors Easier to Control? Why the Association of Glycemia and Mortality in Critical Care is Real," 16th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, November 10-12, 1-page.
5. Thomas, F, Pretty, CG, Stewart, K, Shaw, GM, Desai, T and Chase, JG (2016). "A Model of Endogenous Insulin Secretion During Exercise," 16th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, November 10-12, 1-page (**Winner Bronze – Student Best Paper Research Award**).
6. Shaw, GM, Stewart, KW, Dickson, JL, Pretty, CG and Chase, JG (2016). "The Secret to Safe, Effective and Successful Insulin Dosing," 41st ANZICS/ACCN Intensive Care Annual Scientific Meeting, Perth, Australia, October 20-22, 1-page
7. Shaw, GM, Uyttendaele, V, Dickson, JL, Stewart, KW, Desai, T and Chase, JG (2016). "Glycemic Variability and Mortality in Glycemic Control – Protocol or Patient?" 41st ANZICS/ACCN Intensive Care Annual Scientific Meeting, Perth, Australia, October 20-22, 1-page.
8. Benyo, B, Stewart, K, Homlok, J, Pretty, CG, Chase, JG and Palancz, B (2016). "Specific Validation Analysis of Stochastic ICING Model Based Estimation of Insulin Sensitivity Profile Using Clinical Data," IEEE Systems, Man and Cybernetics Conference (IEEE SMC 2016), Budapest, Hungary, October 9-12, 8-pages, doi: .
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10. Stewart, KW, Pretty, CG, Dickson, JL, Shaw, GM, Benyo, B, Illyes, A, Szabo Nemedi, N and Chase, JG (2016). "Development of a clinically successful tablet-based ICU glycemic control protocol," Medtech CoRE Conference, Auckland, NZ, June 20, 2-pages.
11. Benyo, B, Stewart, K, Homlok, J, Pretty, CG, Chase, JG and Palancz, B (2016). "Clinical Data Based Validation of the Stochastic Version of ICING Model," In: Guran, Bars, Kiss (editors) Proceedings of the International Symposium on Stability, Vibration, and Control of Machines and Structures (SVCS 2016). Budapest, Hungary, June 16-18, pp. 66-79.
12. Stewart, K, Pretty, CG, Thomas, F, Shaw, GM, Desai, T, Benyo, B, Homlok, J, Illyes, A, Szabo-Nemedi, N and Chase, JG (2016). "Generalizability of a Nonlinear Model-based Glycemic Controller," 4th IFAC International Conference on Intelligent Control and Automation Sciences (ICONS 2016), Reims, France, June 1-3, 4-pages, doi: 10.1016/j.ifacol.2016.07.115 (**invited**).
13. Palancz, B, Stewart, K, Homlok, J, Pretty, CG, Chase, JG and Benyo, B (2016). "Stochastic Simulation and Parameter Estimation of the ICING Model," 4th IFAC International Conference on Intelligent Control and Automation Sciences (ICONS 2016), Reims, France, June 1-3, 4-pages, doi: 10.1016/j.ifacol.2016.07.116 (**invited**).
14. Homlok, J, Szlavecz, A, Stewart, K, Illyes, A, Chase, JG and Benyo, B (2016). "The effects of ICU specific nutrition management, as a human factor by using Stochastic Targeted glycaemic control," 4th IFAC International Conference on Intelligent Control and Automation Sciences (ICONS 2016), Reims, France, June 1-3, 4-pages, doi: 10.1016/j.ifacol.2016.07.119 (**invited**).

15. Benyo, B, Kovács-Ábrahám, Z, Szlávecz, A, Illyés, A, Chase, JG and Bogár, L (2016). "STAR szoros vércukorszint szabályozási protokoll PTE Aneszteziológiai és Intenzív Terápiás Intézetében történő bevezetését célzó trial elemzése". , 44th MAITT továbbképző napok és nemzetközi kongresszus. Siófok, Magyarország, May 19-21, 1-page, in: ANESZTEZIOLOGIA ÉS INTENZÍV TERÁPIA 47:(S2) p. 10. (in Hungarian)
16. Benyó, B, Homlok, J, Stewart, K, Illyés, A, Pretty, CG and Chase, JG (2016). "STAR szoros vércukorszint szabályozási protokoll hatásának elemzése a táplálási célértékek és az ápolási ráfordítás szempontjából," 44th MAITT továbbképző napok és nemzetközi kongresszus. Siófok, Magyarország, May 19-21, 1-page, in: ANESZTEZIOLOGIA ÉS INTENZÍV TERÁPIA 47:(S2) p. 11. (in Hungarian)
17. Illyés, A, Némedi Szabó, N, Havas, A, Benyó, B, Homlok, J, and Chase, JG (2016). "Megbízhatunk-e a STAR algoritmus táplálási támogatásában?". (2016) 44th MAITT továbbképző napok és nemzetközi kongresszus. Siófok, Magyarország, May 19-21, 1-page, in: ANESZTEZIOLOGIA ÉS INTENZÍV TERÁPIA 47:(S2) p. 12. (in Hungarian)
18. Homlok, J, Chase, JG and Benyo, B (2016). "Blood glucose model for liver transplantation: Alteration of physiological parameters," IEEE 11th International Symposium on Applied Computational Intelligence and Informatics (SACI 2016), Timisoara, Romania, May 12-14, 6-pages, doi: 10.1109/SACI.2016.7507349
19. Illyés, A, Némedi Szabó, N, Ille, A, Blaskovits, A, Benyó, B, Szlávecz, A, Homlok, J, Chase, JG, Pretty, CG, Havas, A, and Kovács, AZ (2016). "A metabolikus terhelhetőséghez igazított táplálási támogatás és szoros glukózkontroll a STAR protokollal (Feeding support adjusted to metabolic loadability and tight glucose control with STAR protocol)" Magyar Diabetes Társaság XXIV. Kongresszusa. Debrecen, Magyarország: April 28-30, 1-page, in: DIABETOLOGIA HUNGARICA 24:(S1) pp. 33-34. (2016). (in Hungarian)
20. Razak, NN, Ahamad, N, Razak, A, Suhaimi, F, Jamaluddin, U, Ralib, A, Mohd Noor, B, Pretty C and Chase, JG (2016). "Virtual Trials for Control of Glycaemic Levels on Malaysian Critically-Ill Patients," 3rd International Conference on Computer, Communication and Control Technology (I4CT), Kota Kinabalu, Sabah, Malaysia, April 19 – 21, 6-pages.
21. Chase, JG, Dickson, JL and Shaw, GM (2016). "Who doesn't benefit – Glycemic control, organ failure and risk of death," 36th International Symposium on Intensive Care and Emergency Medicine (ISICEM), Brussels, Belgium, March 15-18, 1-page (**invited**, Glycemic Control WG).
22. Chase, JG, Signal, MK and Shaw, GM (2016). "Error graphs, trend compasses and metrics for evaluating CGM accuracy," 36th International Symposium on Intensive Care and Emergency Medicine (ISICEM), Brussels, Belgium, March 15-18, 1-page (**invited**, Glycemic Control WG).
23. Dickson, JL, LeCompte, AJ, Lynn, A, Shaw, GM and Chase, JG (2016). "Modeling glucose-insulin physiology in premature neonates for glycaemic control in intensive care," 8th Annual JSPS Hope Meeting Conference, Tsukuba, Japan, March 7-11, 1-page / poster (**Dickson = JSPS Hope Fellow**).
24. Fontana, V, Dell'Anna, AM, Chase, JG, Desai, T, Vincent, JL, Preiser, JC, Oddo, M and Taccone, F (2016). "Predictors of glucose variability during hypothermia after cardiac arrest," 45th Critical Care Congress Orlando, Florida, February 20-24, 1-page, (also: Critical Care Medicine 43(12 Suppl 1):22-23, November 2015)
25. Barba, E, Lemaire, M, Chase, JG, Desai, T and Preiser, JC (2015). "Effet de la Mobilisation Sur l'Insulino-Sensibilite des Patients de Soins Intensifs," Journees Francophones de Nutrition 2015, Marseilles, France, December 9-11, 1-page.
26. Stewart, K, Thomas, FL, Dickson, JL, Pretty, CG, Shaw, GM, Benyo, B, Chase, JG and Desai, T (2015). "Glycaemic Modeling & Application," IEEE EMBS Benelux Bi-Annual Conference, Nov 26-27, Liege, Belgium, 1-page / poster.
27. Uyttendaele, V, Dickson, JL, Lynn, A, Chase, JG and Desai, T (2015). "Insulin Sensitivity Profile as a Marker for Reduced Outcome in the Neonatal Intensive Care Unit," IEEE EMBS Benelux Bi-Annual Conference, Nov 26-27, Liege, Belgium, 1-page / poster.
28. Sah Pri, A, Chase, JG, Pretty, CG, Shaw, GM, Preiser, JG, Taccone, F, Penning, S and Desai, T (2015). "Stochastic Modelling of Insulin Sensitivity for Out of Hospital Cardiac Arrest Patients treated with Hypothermia," International Conference on Engineering Technologies and Entrepreneurship 2015 (ICETE 2015), Kuala Lumpur, Malaysia, November 16-18, 18-pages.
29. Stewart, KW, Dickson, JL, Pretty, CG, Thomas, F, Shaw, GM and Chase, JG (2015). "High Compliance = Good Control? Compliance of the Stochastic TARgeted (STAR) Glycemic Control Protocol," 15th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, USA, October 22-24, 1-page.

30. Uyttendaele, V, Dickson, JL, Lynn, A, Chase, JG and Desaive, T (2015). "Insulin Sensitivity Profile as a Marker for Reduced Outcome in the Neonatal Intensive Care Unit," 15th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, USA, October 22-24, 1-page.
31. Mansell, EJ, Docherty, PD and Chase, JG (2015). "The detectability of confounding effects in glycemic diary data from in silico patients with diabetes," 15th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, USA, October 22-24, 1-page.
32. Docherty, PD, Othman, NA, Chase, JG, Bell, DA and Krebs, JD (2015). "Basal Glucose is just the first measured point ... right?," 15th Annual Diabetes Technology Meeting (DTM), Bethesda, MD, USA, October 22-24, 1-page.
33. Mombaerts, L, Thomas, F, Signal, MK, Desaive, T and Chase, JG (2015). "Continuous Glucose Monitoring: Using CGM to Guide Insulin Therapy Virtual Trials Results," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.124.
34. Othman, NA, Docherty, PD, Damanhuri, NS and Chase, JG (2015). "A Proportional-Derivative Endogenous Insulin Secretion model with an Adapted Gauss Newton Approach," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.109.
35. Dickson, JL, Pretty, CG, Fisk, L, Alswailer, J and Chase, JG (2015). "Modelling insulin clearance and degradation in very premature infants," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.107.
36. Dickson, JL, Signal, MK, Harris, DL, Gabor, M, Weston, PJ, Harding, JE, Toth-Heyn, P, Homlok, J, Benyo, B and Chase, JG (2015). "Modeling intestinal glucose absorption using continuous glucose monitor data," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.125.
37. Mansell, EJ, Docherty, PD, Chase, JG and Benyo, B (2015). "An eigen-analysis of the relationships between model structure, discrete data, measurement error and resulting parameter identification distributions," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.120.
38. Mansell, EJ, Docherty, PD and Chase, JG (2015). "The precision of identified variables with respect to multivariable set size in glycaemic data from a virtual type 1 diabetic patient," 9th IFAC Symposium on Biological and Medical Systems (BMS 2015), August 31 – September 2, Berlin, Germany, 6-pages, doi: 10.1016/j.ifacol.2015.10.119.
39. Dickson, JL, Thomas, F, Stewart, K, Pretty, CG, Shaw, GM and Chase, JG (2015). "Evaluation of a Plasma Insulin Model for Glycaemic Control in Intensive Care," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, pp. 4009 - 4012, doi: 10.1109/EMBC.2015.7319273
40. Guo, P, Chiew, YS, Shaw, GM and Chase, JG (2015). "Validation of Clinical Activity Tracking System in Intensive Care Unit to assess nurse workload distribution," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, pp. 458 - 461, doi: 10.1109/EMBC.2015.7318398
41. Thomas, F, Dickson, JL, Pretty, CG, Stewart, K, Fisk, L, Shaw, GM and Chase, JG (2015). "Accuracy and Optimization of a Subcutaneous Insulin Model for Less Acute Critical Care Patients," IEEE Engineering in Medicine and Biology Conference (IEEE EMBC 2015), August 25-29, Milan, Italy, pp. 4435 - 4438, doi: 10.1109/EMBC.2015.7319379
42. Benyo, B, Homlok, J, Illyes, A Szabo Nemedi, N, Havas, A, Blaskovits, A, Ille, A, Pretty, CG, Shaw, GM and Chase, JG (2015). "Intenzív betegellátásban szoros vércukor szabályozási protokoll mellett alkalmazott két különböző táplálási protokoll alkalmazásának összehasonlító elemzése," Magyar Aneszteziológiai és Intenzív Terápiás Társaság 43. Kongresszusa (MAITT 2015), Siofok, Hungary, May 28-30, 1-page. In: ANESZTEZIOLÓGIA ÉS INTENZÍV TERÁPIA, Vol 45(S1), pp. 13-14. (in Hungarian)
43. Illyes, A Szabo Nemedi, N, Havas, A, Blaskovits, A, Ille, A, Benyo, B, Homlok, J, Pretty, CG, Shaw, GM and Chase, JG (2015). "A metabolikus terheltséghez igazított táplálási támogatás és szoros glükóz kontroll a STAR protokollal," Magyar Aneszteziológiai és Intenzív Terápiás Társaság 43. Kongresszusa (MAITT 2015), Siofok, Hungary, May 28-30, 1-page. In: ANESZTEZIOLÓGIA ÉS INTENZÍV TERÁPIA, Vol 45(S1), pp. 16. (in Hungarian)
44. Stewart, KS, Tomlinson, H, Pretty, CG, Fisk, L, Thomas, F, Shaw, GM, Benyo, B, Illyes, A, Szabo-Nemedi, N and Chase, JG (2015). "Clinical Glycaemic Performance of the STAR Protocol," Health Research Society of Canterbury HRSC Grand Round, Christchurch, May 21, 1- page (also published in NZ Medical Journal).

45. Illyes, A, Benyo, B, Homlok, J, Havas, A, Szabo Nemedi, N, **Chase, JG**, Ille, A and Blaskovits, A (2015). "Hypoglykaemia nélküli glukozkontroll kritikus állapotú betegeknél STAR protokoll alkalmazásával," Magyar Diabetes Tarsaság XXIII Kongresszusa, Budapest, Hungary, May 14-16, pp. 11. Appears in: *Diabetologia Hungarica*, Vol 23(S1), pp. 39-40. (in Hungarian)
46. Shaw, GM, Chase, JG, Pretty, CG, Benyo, B, Illyes, A, Szabo-Nemedi, N and Desaive, T (2015). "Something from (Almost) Nothing: Using Model Based Therapeutics to Provide Best Care at the Best Price," 3rd SG-ANZICS Intensive Care Forum, Singapore, April 24-26, 1-page (**invited talk**).
47. Shaw, GM and Chase, JG (2015). "Curiosity is dead, the 'cat' is alive: how our culture and education system have killed 'curiosity', and why this must change," 3rd SG-ANZICS Intensive Care Forum, Singapore, April 24-26, 1-page (**invited talk**).
48. Pretty, CG, Stewart, K, Tomlinson, H, Thomas, F, Shaw, GM, Illyes, A, Szabo-Nemedi, N, Benyo, B and Chase, JG (2015). "STAR Model-Based Glycaemic Control – Clinical Results and Generalisability," 3rd SG-ANZICS Intensive Care Forum, Singapore, April 24-26, 1-page.
49. Shaw, GM, Pretty, CG, Thomas, F, Tomlinson, H, Stewart, K and Chase, JG (2015). "Increased Nutrition with Equal Glycaemic Control Associated with Shortened Insulin Therapy," 3rd SG-ANZICS Intensive Care Forum, Singapore, April 24-26, 1-page (**finalist for Best Poster Award**).
50. Shaw GM and Chase, JG (2015). Biomedical Solutions to Problems in Intensive Care- Model-Based Therapeutics: Adding Quality but not Cost to Care. Measuring the Un-Measurable to Protocolise and Improve Care Patient-Specific "One Method Fits All" Care, Decentralizing Patient Care to the Bedside," 2015 Tongariro Cardiac Surgery Meeting, Queenstown, March 20-22, 1-page (**invited**)
51. Chase, JG, Desaive, T and Shaw, GM (2015). "Measuring glucose control: can one metric rule them all?" 35th International Symposium on Intensive Care and Emergency Medicine (ISICEM), Brussels, Belgium, March 16-18, 1-page (**invited Glucose Control closed format meeting**).
52. Chase, JG, Desaive, T and Shaw, GM (2015). "Technologies for semi-automated glucose control, and the impact of the human in the loop," 35th International Symposium on Intensive Care and Emergency Medicine (ISICEM), Brussels, Belgium, March 16-18, 1-page (**invited Glucose Control closed format meeting**).
53. Dickson, JL, Lynn, A, Benyo, B, Shaw, GM and Chase, JG (2014). "Glycemic control in the women's hospital NICU," MedTech in Christchurch Workshop, University of Otago, Christchurch, Dec 16, 1-page (**invited**).
54. Dickson, JL, Lynn, AM, LeCompte, AJ, Desaive, T, Benyo, B, Chase, JG (2014). "Clinical Results From a Glycaemic Control Protocol Implementation in Neonatal Care," 13th Belgian Day On Biomedical Engineering, November 28, Brussels, Belgium, 1-page.
55. Benyo, B, Homlok, J, Illyes, A, Szabo-Nemedi, N, Shaw, GM and Chase, JG (2014). "Modell Alapú Vércukor Szabályozási Protokoll Kritikus Állapotú Betegeknél Kezelésére," Biotechnológia ésmérnökimódszerek a medicinában, November 21, Budapest, Hungary, 1-page + presentation (**invited**).
56. Stewart, KW, Pretty, CG, Tomlinson, H, Fisk, L, Shaw, GM and Chase, JG (2014). "Stochastic Model Predictive (STOMP) Glycemic Control for the Intensive Care Unit," 14th Annual Diabetes Technology Meeting (DTM), November 6-8, Bethesda, MD, 1-page.
57. Dickson, JL, Signal, MK, Benyo, B, Homlok, J, Marics, G and Chase, JG (2014). "Gut Absorption Rates for Glucose in Term and Premature NICU Infants Using CGM Data," 14th Annual Diabetes Technology Meeting (DTM), Nov 6-8, Bethesda, MD, 1-page.
58. Tomlinson, H, Fisk, L, Chase, JG, Pretty, CG and Shaw, GM (2014). "Glycemic and Nutrition Delivery: Performance of the STAR Protocol," 14th Annual Diabetes Technology Meeting (DTM), Nov 6-8, Bethesda, MD, 1-page.
59. Homlok, J, Benyo, B and Chase, JG (2014). "A Deviation in BG dynamics during liver transplantation comparing ICU patients: a model-based approach," 48th German Society for Biomedical Engineering Conference (BMT 2014), October 8-10, Hannover, Germany, 4-pages.
60. Dickson, JL, Pretty, CG, Hewett, JN, Gunn, CA, Lynn, A, Shaw, GM and Chase, JG (2014). "Modeling endogenous glucose production for model-based tight glycaemic control in the neonatal intensive care unit," 48th German Society for Biomedical Engineering Conference (BMT 2014), October 8-10, Hannover, Germany, 4-pages.
61. Dickson, JL, Lynn, A, Gunn, CA, LeCompte, AJ, Fisk, L, Shaw, GM and Chase, JG (2014). "Performance and Safety of STAR Glycaemic Control in Neonatal Intensive Care: Further Clinical Results Including Pilot Results from a New Protocol Implementation," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.00210 (**invited**)

62. Sah Pri, A, Chase, JG, Pretty, CG, Shaw, GM, Preiser, JC, Penning, S, Desaive, T and Taccone, F (2014). "Insulin Sensitivity Variability during Hypothermia," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.01090 (**invited**).
63. Fisk, L, Docherty, PD, Pretty, CG, Dickson, JL, Shaw, GM and Chase, JG (2014). "Virtual Trials with b-spline Basis Functions and Stochastic Differential Equations," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.01199 (**invited**).
64. Penning, S, Pironet, A, Chase, JG, Pretty, CG and Desaive (2014). "Survey about diffusion and adoption of glycaemic controller in European intensive care units," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.01949 (**invited**).
65. Penning, S, Lambermont, Desaive, T, Pretty, CG and **Chase, JG** (2014). "In silico assessment of a computerized model-based glycaemic control approach in a Belgian medical intensive care unit," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.00581 (**invited**).
66. Homlok, J, Chase, JG and Benyo, B (2014). "Variability of Model Based Insulin Sensitivity in Liver Transplanted Patients," 19th IFAC World Congress, August 24-29, Cape Town, South Africa, 6-pages, doi: 10.3182/20140824-6-ZA-1003.02806 (**invited**).
67. Homlok, J, Chase, JG, Doktor, T and Benyo, B (2014). "Model based estimation of physiological parameters during the reperfusion phase of liver transplantation," IEEE 18th Intl Conf on Intelligent Engineering Systems (INES 2014), July 3-5, Tihany, Hungary, 4-pages.
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MV: Mechanical Ventilation (and pulmonary mechanics)

Journal Articles: 68 total; (3 invited)

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Conference Articles: 98 total; (13 invited; 3 Best Paper Awards)

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