

Dan Stieper Karbing
Lektor
Institut for Medicin og Sundhedsteknologi
Det Sundhedsvidenskabelige Fakultet
Respiratory and Critical Care (R-Care)
Respiratory and Critical Care (R-Care)
AI for the People
Adressestype: Besøgsadresse.
Selma Lagerløfs Vej 249
12-03-051
9260
Gistrup
Danmark
E-mail: dank@hst.aau.dk
Telefon: +4599407458



Ansættelse

Lektor
Lektor
Institut for Medicin og Sundhedsteknologi
Det Sundhedsvidenskabelige Fakultet
Gistrup, Danmark
15 aug. 2009 → 31 dec. 4712

Lektor
Lektor
Det Sundhedsvidenskabelige Fakultet
Gistrup, Danmark
15 aug. 2009 → 31 dec. 4712

Respiratory and Critical Care (R-Care)
Det Sundhedsvidenskabelige Fakultet
Gistrup, Danmark
1 jan. 2020 → present

Lektor
Lektor
Respiratory and Critical Care (R-Care)
Det Sundhedsvidenskabelige Fakultet
Gistrup, Danmark
15 aug. 2009 → 31 dec. 4712

AI for the People
Det Tekniske Fakultet for IT og Design
Aalborg, Danmark
1 nov. 2019 → present

Bestyrelsesmedlem
Aw Technologies ApS
Nørresundby, Danmark

Publikationer

Evaluation of a New Device for Clearing Secretions From Lower Airways
Vivona, L., Madotto, F., Carlesso, E., Florio, G., Rees, S. E., Karbing, D. S., Sodi, F., Zainaghi, I., Rossi, V., Panigada, M., Zanella, A. & Grasselli, G., 28 apr. 2025, (E-pub ahead of print) I: Respiratory Care.

Metabolic cost of physical rehabilitation in mechanically ventilated patients in critical care: an observational study
Jenkins, T. O., Karbing, D. S., Rees, S. E., Poulsen, M. K., Patel, B. V., Polkey, M. I. & MacBean, V., 5 apr. 2025, I: BMJ open respiratory research. 12, 1, e002878.

Evaluation of decision support to wean patients from mechanical ventilation in intensive care: a prospective study reporting clinical and physiological outcomes

Vizcaychipi, M. P., Karbing, D. S., Martins, L., Gupta, A., Moreno-Cuesta, J., Naik, M., Welters, I., Singh, S., Randell, G., Osman, L. & Rees, S. E., apr. 2025, I: Journal of Clinical Monitoring and Computing. 39, 2, s. 393-404 12 s., e042145.

Accelerometer-based estimation of respiratory rate using principal component analysis and autocorrelation

Hostrup, M. C. F., Nielsen, A. S., Sørensen, F. E., Kragballe, J. O., Østergaard, M. U., Korsgaard, E., Schmidt, S. E. & Karbing, D. S., 31 mar. 2025, I: Physiological Measurement. 46, 3, 035005.

A randomized control trial evaluating the advice of a physiological-model/digital twin-based decision support system on mechanical ventilation in patients with acute respiratory distress syndrome

Patel, B. V., Mumby, S., Johnson, N., Handslip, R., Patel, S., Lee, T., Andersen, M. S., Falaschetti, E., Adcock, I. M., McAuley, D. F., Takata, M., Staudinger, T., Karbing, D. S., Jabaudon, M., Schellongowski, P., Rees, S. E. & DeVENT study group, 30 okt. 2024, I: Frontiers in Medicine. 11, 1473629.

Intraoperative Ventilation/Perfusion Mismatch and Postoperative Pulmonary Complications after Major non-cardiac surgery: a prospective cohort study

Scaramuzzo, G., Stieper Karbing, D., Ball, L., Vigolo, F., Frizziero, M., Scomparin, F., Ragazzi, R., Verri, M., Rees, S. E., Volta, C. A. & Spadaro, S., 1 okt. 2024, I: Anesthesiology. 141, 4, s. 693-706 14 s.

A Prospective, Longitudinal Study Evaluating the Efficacy of an Automated Secretion Removal Technology

Sinnige, J. S., Karbing, D. S., Valk, C. M. A., Schultz, M. J., Rees, S. E. & Paulus, F., 1 aug. 2024, I: Respiratory Care. 69, 8, s. 931-936 6 s.

Clinical practice, decision-making, and use of clinical decision support systems in invasive mechanical ventilation: a narrative review

Murali, M., Ni, M., Karbing, D. S., Rees, S. E., Komorowski, M., Marshall, D., Ramnarayan, P. & Patel, B. V., jul. 2024, I: British Journal of Anaesthesia. 133, 1, s. 164-177 14 s.

Hypoxia in the pulmonary vein increases pulmonary vascular resistance independently of oxygen in the pulmonary artery

Magnusdottir, S. O., Simonsen, C., Karbing, D. S., Rasmussen, B. S. & Kjaergaard, B., apr. 2024, I: Animal models and experimental medicine. 7, 2, s. 156-165 10 s.

Four Different Models for Simulation-based Training of Bronchoscopic Procedures

Kronborg, S. H., Arshad, A., Karbing, D. S. & Lundgaard, A. C., 20 jan. 2024.

Four different models for simulation-based training of bronchoscopic procedures

Kronborg, S. H., Karbing, D. S., Arshad, A. & Lundgaard, A. C., 9 jan. 2024, I: BMC Pulmonary Medicine. 24, 1, 23.

Efficacy of an automated secretion removal technology at different inspiratory pressures

Nielsen, A. H., Karbing, D. S., Sølling, C. G., Winding, R. R., Rees, S. E. & Dey, N., nov. 2023, I: Respiratory Care. 68, 11, s. 1502-1509 8 s.

Effect of expiratory flow limitation on ventilation/perfusion mismatch and perioperative lung function during pneumoperitoneum and Trendelenburg position

Fogagnolo, A., Spadaro, S., Karbing, D. S., Scaramuzzo, G., Mari, M., Guirrini, S., Ragazzi, R., Al-Husinat, L., Greco, P., Rees, S. E. & Volta, C. A., sep. 2023, I: Minerva Anestesiologica. 89, 9, s. 733-743 11 s.

The metabolic cost of inspiratory muscle training in mechanically ventilated patients in critical care

Jenkins, T. O., MacBean, V., Poulsen, M. K., Karbing, D. S., Rees, S. E., Patel, B. V. & Polkey, M. I., 7 jul. 2023, I: Intensive Care Medicine Experimental. 11, 1, 41.

Inspiratory pressure waveform influences time to failure, respiratory muscle fatigue, and metabolism during resistive breathing

Poulsen, M. K., Rees, S. E., Hansen, J., Stevenson, A. J. T., Kjærgaard, S. C., Volta, C. A., Spadaro, S. & Karbing, D. S., 5 maj 2023, I: *Physiological Reports*. 11, 9, e15668.

Heterogeneity of Ventilation/Perfusion Mismatch at Different Levels of PEEP and in Respiratory Mechanics Phenotypes of COVID-19 ARDS

Scaramuzzo, G., Karbing, D. S., Fogagnolo, A., Mauri, T., Spinelli, E., Mari, M., Turrini, C., Montanaro, F., Volta, C. A., Rees, S. E. & Spadaro, S., 1 feb. 2023, I: *Respiratory Care*. 68, 2, s. 188-198 11 s.

Computer clinical decision support that automates personalized clinical care: a challenging but needed healthcare delivery strategy

Morris, A. H., Horvat, C., Stagg, B., Grainger, D. W., Lanspa, M., Orme, J., Clemmer, T. P., Weaver, L. K., Thomas, F. O., Grissom, C. K., Hirshberg, E., East, T. D., Wallace, C. J., Young, M. P., Sittig, D. F., Suchyta, M., Pearl, J. E., Pesenti, A., Bombino, M. & Beck, E. & 50 flere, Sward, K. A., Weir, C., Phansalkar, S., Bernard, G. R., Thompson, B. T., Brower, R., Truwit, J., Steingrub, J., Hitzen, R. D., Willson, D. F., Zimmerman, J. J., Nadkarni, V., Randolph, A. G., Curley, M. A. Q., Newth, C. J. L., Lacroix, J., Agus, M. S. D., Lee, K. H., deBoisblanc, B. P., Moore, F. A., Evans, R. S., Sorenson, D. K., Wong, A., Boland, M. V., Dere, W. H., Crandall, A., Facelli, J., Huff, S. M., Haug, P. J., Pielmeier, U., Rees, S. E., Karbing, D. S., Andreassen, S., Fan, E., Goldring, R. M., Berger, K. I., Oppenheimer, B. W., Ely, E. W., Pickering, B. W., Schoenfeld, D. A., Tocino, I., Gonnering, R. S., Pronovost, P. J., Savitz, L. A., Dreyfuss, D., Slutsky, A. S., Crapo, J. D., Pinsky, M. R., James, B. & Berwick, D. M., 13 dec. 2022, I: *Journal of the American Medical Informatics Association*. 30, 1, s. 178-194 17 s.

In Vivo Evaluation of a New Endotracheal Tube Cuff Controller Promoting Tracheal Secretion Clearance: Preliminary Results

Vivona, L., Zanella, A., Rees, S. E., Karbing, D. S., Bellotti, M., Florio, G., Sodi, F., Caddeo, G., Panigada, M., Pesenti, A. & Grasselli, G., okt. 2022, I: *Respiratory Care*. 67, Suppl. 10, 3776321.

Inspiratory pressure pattern affects respiratory muscle fatigue during resistive breathing

Poulsen, M., Hansen, J., Rees, S., Stevenson, A., Kjærgaard, S., Volta, C., Spadaro, S. & Karbing, D., jun. 2022, I: *Chest*. 161, Suppl. 6, s. 491A

What is new in respiratory monitoring?

Karbing, D. S., Leonhardt, S., Perchiazzi, G. & Bates, J. H. T., jun. 2022, I: *Journal of Clinical Monitoring and Computing*. 36, 3, s. 599-607 9 s.

Appropriate ventilator settings for the TrachFlush automated tracheal secretion removal technology: preliminary results

Karbing, D. S., Dey, N., Sølling, C. G., Nielsen, A. H., Rees, S. E. & Winding, R., 1 mar. 2022, I: *Critical Care*. 26, Suppl. 1, s. 59-60 P150.

Efficacy and safety of TrachFlush artificial cough maneuver for fluid removal in simulated breathing

Karbing, D. S., Zanella, A. & Rees, S. E., 1 mar. 2022, I: *Critical Care*. 26, Suppl. 1, s. 59 1 s., P149.

Transparent decision support for mechanical ventilation using visualization of clinical preferences

Rees, S. E., Spadaro, S., Dalla Corte, F., Dey, N., Brohus, J. B., Scaramuzzo, G., Lodahl, D., Winding, R. R., Volta, C. A. & Karbing, D. S., 24 jan. 2022, I: *BioMedical Engineering Online*. 21, 1, 5.

Decision support system to evaluate ventilation in the acute respiratory distress syndrome (DeVENT study)—trial protocol

Patel, B., Mumby, S., Johnson, N., Falaschetti, E., Hansen, J., Adcock, I., McAuley, D., Takata, M., Karbing, D. S., Jabbadon, M., Schellengowski, P., Rees, S. E. & DeVENT study group, 17 jan. 2022, I: *Trials*. 23, 1, 47.

A Chest-Mounted Accelerometer for Estimation of Cardiorespiratory Fitness

Schmidt, S. E., Hansen, M. T., Sørensen, K., Rømer, T., Gliemann, L., Karbing, D. S., Poulsen, M. K., Helge, J. W. & Søgaard, P., 2022, I: *Cardiovascular Digital Health Journal*. 3, 4, Suppl., s. S21-S22

Effects of oxygen availability on microvascular responsiveness in human tibialis anterior muscle

Franch, J., Thomsen, L. P., Rokkedal-Lausch, T., Poulsen, M. K., Karbing, D. S. & Larsen, R. G., 2022, I: Acta Physiologica. 236, Suppl. 725, s. 89-90

Analyse af relativ alderseffekt i dansk børnefodbold (U3-U12) Anno 2020

Raab, K., Karbing, D. S. & Rossing, N. N., 15 nov. 2021, 20 s.

Enabling a learning healthcare system with automated computer protocols that produce replicable and personalized clinician actions

Morris, A. H., Stagg, B., Lanspa, M., Orme, J., Clemmer, T. P., Weaver, L. K., Thomas, F., Grissom, C. K., Hirshberg, E., East, T. D., Wallace, C. J., Young, M. P., Sittig, D. F., Pesenti, A., Bombino, M., Beck, E., Sward, K. A., Weir, C., Phansalkar, S. S. & Bernard, G. R. & 48 flere, Taylor Thompson, B., Brower, R., Truwit, J. D., Steingrub, J., Duncan Hite, R., Willson, D. F., Zimmerman, J. J., Nadkarni, V. M., Randolph, A., Curley, M. A. Q., Newth, C. J. L., Lacroix, J., Agus, M. S. D., Lee, K. H., deBoisblanc, B. P., Scott Evans, R., Sorenson, D. K., Wong, A., Boland, M. V., Grainger, D. W., Dere, W. H., Crandall, A. S., Facelli, J. C., Huff, S. M., Haug, P. J., Pielmeier, U., Rees, S. E., Karbing, D. S., Andreassen, S., Fan, E., Goldring, R., Berger, K., Oppenheimer, B., Ely, E. W., Gajic, O., Pickering, B., Schoenfeld, D., Tocino, I., Gonnering, R., Pronovost, P., Savitz, L., Dreyfuss, D., Slutsky, A., Crapo, J., Angus, D., Pinsky, M., James, B. & Berwick, D., 12 jun. 2021, I: Journal of the American Medical Informatics Association. 28, 6, s. 1330-1344 15 s.

Multiple-day high-dose beetroot juice supplementation does not improve pulmonary or muscle deoxygenation kinetics of well-trained cyclists in normoxia and hypoxia

Rokkedal-Lausch, T., Franch, J., Poulsen, M. K., Thomsen, L. P., Weitzberg, E., Kamavuako, E. N., Karbing, D. S. & Larsen, R. G., 1 jun. 2021, I: Nitric Oxide: Biology and Chemistry. 111-112, s. 37-44 8 s.

Physiological effects of two driving pressure-based methods to set positive end-expiratory pressure during one lung ventilation

Spadaro, S., Grasso, S., Karbing, D. S., Santoro, G., Cavallesco, G., Maniscalco, P., Murgolo, F., Di Mussi, R., Ragazzi, R., Rees, S. E., Volta, C. A. & Fogagnolo, A., 2021, I: Journal of Clinical Monitoring and Computing. 35, 5, s. 1149-1157

Intensive Care Weaning (iCareWean) protocol on weaning from mechanical ventilation: a single-blinded multicentre randomised control trial comparing an open-loop decision support system and routine care, in the general intensive care unit

Vizcaychipi, M. P., Martins, L., White, J. R., Karbing, D. S., Gupta, A., Singh, S., Osman, L., Moreno-Cuesta, J. & Rees, S., 2 sep. 2020, I: BMJ Open. 10, 9, 9 s., e042145.

A Clinical Method for Estimation of VO₂max Using Seismocardiography

Sørensen, K., Poulsen, M. K., Karbing, D. S., Søgaard, P., Struijk, J. J. & Schmidt, S. E., sep. 2020, I: International Journal of Sports Medicine. 41, 10, s. 661-668 8 s.

Oxygen: Uptake and Transport in Blood

Karbing, D. S. & Rees, S. E., maj 2020, *Cotes' Lung Function*. Cotes, J. E., Maynard, R. L., Pearce, S. J., Nemery, B. B., Wagner, P. D. & Cooper, B. G. (red.). 7 udg. Wiley-Blackwell, s. 353-375 23 s.

Journal of Clinical Monitoring and Computing 2018-2019 end of year summary: respiration

Karbing, D. S., Perchiazzi, G., Rees, S. E. & Jaffe, M. B., apr. 2020, I: Journal of Clinical Monitoring and Computing. 34, 2, s. 197-205 9 s.

Changes in shunt, ventilation/perfusion mismatch, and lung aeration with PEEP in patients with ARDS: a prospective single-arm interventional study

Karbing, D. S., Panigada, M., Bottino, N., Spinelli, E., Protti, A., Rees, S. E. & Gattinoni, L., 23 mar. 2020, I: Critical Care (Online Edition). 24, 1, 111.

Medicin og kunstig intelligens: Glem ikke det, vi allerede ved

Karbing, D. S., Pielmeier, U. S., Thomsen, L. P., Andreassen, S. & Rees, S. E., feb. 2020, I: Medicoteknik. 7, s. 20-22

A novel non-exercise method for estimation of cardiorespiratory fitness using a chest mounted accelerometer
Schmidt, S. E., Sørensen, K., Poulsen, M. K., Karbing, D. S., Søgaard, P. & Struijk, J. J., 2020.

Reliability of, and Agreement Between, two Breath-by-Breath Indirect Calorimeters at Varying Levels of Inspiratory Oxygen
Poulsen, M. K., Thomsen, L. P., Kjærgaard, S., Rees, S. E. & Karbing, D. S., okt. 2019, I: Nutrition in Clinical Practice. 34, 5, s. 767-774 8 s.

Effect of intravenous morphine bolus on respiratory drive in ICU patients
Dey, N., Thomsen, L. P., Larraza, S., Winding, R., Rees, S. E. & Karbing, D. S., 28 sep. 2019, I: Intensive Care Medicine Experimental. 7, Suppl. 3, s. 171 1 s., 725.

Where do elite youth football players come from?
Rossing, N. N., Skrubbeltrang, L. S., Pedersen, M. Z. B. & Karbing, D. S., 25 jun. 2019, I: Dansk Sportsmedicin. 7 s.

A Pilot Bench Study of Decision Support for Proportional Assist Ventilation
Karbing, D. S., Lobo-Valbuena, B., Poulsen, M. K., Bredal Brohus, J., Abella, A., Gordo, F. & Rees, S. E., 23 jun. 2019, *2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. IEEE (Institute of Electrical and Electronics Engineers), 5 s. 8856557. (I E E E Engineering in Medicine and Biology Society. Conference Proceedings).

Chronic high-dose beetroot juice supplementation improves time trial performance of well-trained cyclists in normoxia and hypoxia
Rokkedal-Lausch, T., Franch, J., Poulsen, M. K., Thomsen, L. P., Weitzberg, E., Kamavuako, E. N., Karbing, D. S. & Larsen, R. G., 1 apr. 2019, I: Nitric Oxide: Biology and Chemistry. 85, s. 44-52 9 s.

Correlation Between Valve Event Amplitudes in the Seismocardiogram and VO₂-max
Sørensen, K., Poulsen, M. K., Karbing, D. S., Søgaard, P., Struijk, J. J. & Schmidt, S. E., 2019.

Effekten af rødbedesæft på enkeltstartspræstationen hos veltrænede cykelryttere – når de udsættes for lav iltfraktion i indåndingsluften
Franch, J., Rokkedal-Lausch, T., Poulsen, M. K., Thomsen, L. P., Karbing, D. S. & Larsen, R. G., 2019, I: Dansk Sportsmedicin.

Metabolic measures and esophageal measured tension time indexin patients successfully passing a SBT
Poulsen, M. K., Spadaro, S., Dalla Corte, F., Cricca, V., Rees, S. E., Karbing, D. S. & Volta, C. A., 2019, I: Intensive Care Medicine Experimental. 7, Suppl. 3, 55, s. 300-301 2 s., 001554.

Model-based decision support for support mode mechanical ventilation
Karbing, D. S., 2019. 1 s.

The Beacon Caresystem: A system providing advice for mechanical ventilation
Rees, S. E. & Karbing, D. S., 2019. 1 s.

An investigation of Danish male youth football – is something rotten in the state of Denmark?
Ryom, K., Rossing, N. N., Flattum, A. & Karbing, D. S., 1 sep. 2018, I: Journal of Physical Education and Sport. 18, 3, s. 1439-1444 6 s.

Relative age effect and the re-selection of Danish male handball players for national teams
Wrang, C. M., Rossing, N. N., Lilholt, R. M., Hansen, C. G., Hansen, C. B. & Karbing, D. S., 31 aug. 2018, I: Journal of Human Kinetics. 63, 1, s. 33-41 9 s.

Journal of Clinical Monitoring and Computing 2017 end of year summary: respiration

Karbing, D. S., Perchiazzi, G., Rees, S. E. & Jaffe, M. B., apr. 2018, I: Journal of Clinical Monitoring and Computing. 32, 2, s. 197-205 9 s.

Influence of population size, density, and proximity to talent clubs on the likelihood of becoming elite youth athlete

Rossing, N. N., Stentoft, D., Flattum, A., Côté, J. & Karbing, D. S., mar. 2018, I: Scandinavian Journal of Medicine & Science in Sports. 28, 3, s. 1304–1313 10 s.

An open-loop, physiological model based decision support system can reduce pressure support while acting to preserve respiratory muscle function

Spadaro, S., Karbing, D. S., Dalla Corte, F., Mauri, T., Moro, F., Gioia, A., Volta, C. A. & Rees, S. E., 2018, I: Journal of Critical Care. 48, s. 407-413 7 s.

An open-loop, physiologic model-based decision support system can provide appropriate ventilator settings

Karbing, D. S., Spadaro, S., Dey, N., Ragazzi, R., Marangoni, E., Dalla Corte, F., Moro, F., Lodahl, D., Hansen, N. S., Winding, R., Rees, S. E. & Volta, C. A., 2018, I: Critical Care Medicine. 46, 7, s. e642–e648

Comparison of breathing effort estimates in pressure support mechanical ventilation

Karbing, D. S., Spadaro, S., Dalla Corte, F., Poulsen, M. K., Rees, S. E. & Volta, C. A., 2018, s. 1.

Muscle blood oxygen level dependent (bold) responses to brief contraction and cuff occlusion: effects of hypoxia and hyperoxia

Larsen, R. G., Karbing, D. S., Rokkedal-Lausch, T., Frøkjær, J. B., Franch, J. & Thomsen, L. P., 2018, *Book of Abstracts, 23rd Annual Congress of the European College of Sport Science, ECSS, 4-7 July 2018, Dublin, Ireland*. European College of Sport Science, s. 578 1 s.

Physiologic evaluation of ventilation perfusion mismatch and respiratory mechanics at different positive end-expiratory pressure in patients undergoing protective one-lung ventilation

Spadaro, S., Grasso, S., Karbing, D. S., Fogagnolo, A., Contoli, M., Bollini, G., Ragazzi, R., Cinnella, G., Verri, M., Cavallesco, N. G., Rees, S. E. & Carlo, V. A., 2018, I: Anesthesiology. 128, 3, s. 531–538 8 s.

Beacon Caresystem: et samarbejde mellem virksomhed og universitet

Rees, S. E. & Karbing, D. S., 2017, I: Medicoteknik. 4, 5, s. 6-8

Determining the appropriate model complexity for patient-specific advice on mechanical ventilation

Rees, S. E. & Karbing, D. S., 2017, I: Biomedizinische Technik. 62, 2, s. 183-198

Effects of beetroot juice supplementation and hypoxia on time trial performance in well-trained cyclists

Lausch, T. R., Larsen, R. G., Poulsen, M. K., Karbing, D. S., Thomsen, L. P. & Franch, J., 2017, I: Medicine and Science in Sports and Exercise. 49, 5S, s. 566 2062.

Identification of dynamic hyperinflation using a combination of expiratory flow and respiratory carbon dioxide signals

Rees, S. E. (Opfinder), Larraza Rico, S. (Opfinder) & Karbing, D. S. (Opfinder), 2017, IPC nr. A61B 5/083 (2006.01), A61B 5/087 (2006.01), A61B 5/00 (2006.01), A61M 16/00 (2006.01), Patentnr. WO/2017/000961, 5 jan. 2017

Journal of Clinical Monitoring and Computing 2016 end of year summary: respiration

Karbing, D. S., Rees, S. E. & Jaffe, M. B., 2017, I: Journal of Clinical Monitoring and Computing. 31, 2, s. 247-252

Simulation training for residents focused on mechanical ventilation: A randomized trial using mannequin-based versus computer-based simulation

Spadaro, S., Karbing, D. S., Fogagnolo, A., Ragazzi, R., Mojoli, F., Astolfi, L., Gioia, A., Marangoni, E., Rees, S. E. & Carlo, V. A., 2017, I: Simulation in Healthcare. 12, 6, s. 349-355

The relation between proximity to talent clubs and talent development in Danish handball and football

Rossing, N. N., Stentoft, D. & Karbing, D. S., 2017.

Typical patterns of expiratory flow and carbon dioxide in mechanically ventilated patients with spontaneous breathing
Rees, S. E., Larraza Rico, S., Dey, N., Spadaro, S., Brohus, J. B., Winding, R. W., Volta, C. A. & Karbing, D. S., 2017, I: Journal of Clinical Monitoring and Computing. 31, 4, s. 773-781

Variation of pulmonary shunt at different levels of positive end-expiratory pressure in patients undergoing one-lung ventilation

Savino, S., Fogagnolo, A., Fanni, A., Karbing, D. S., Rees, S. E. & Volta, C. A., 2017, I: European Journal of Anaesthesiology. 34, e-Suppl. 55, s. 191 07AP07-1.

A mechanical ventilation system for respiration with decision support

Karbing, D. S. (Opfinder), Rees, S. E. (Opfinder) & Jensen, J. B. (Opfinder), 2016, IPC nr. G06F 19/00 (2011.01) , A61B 5/08 (2006.01), A61M 16/00 (2006.01), Patentnr. WO2016037627 (A1), 17 mar. 2016, Prioritetsdato 11 sep. 2015, Prioritetsnr. PCT/DK2015/050271

Comparison of two indirect calorimetry devices at varying levels of inspired oxygen

Poulsen, M. K., Thomsen, L. P., Kjærgaard, S., Rees, S. E. & Karbing, D. S., 2016, I: Intensive Care Medicine Experimental. 4, Suppl. 1, Part Two, s. 258-259 A497.

Effect of positive end-expiratory pressure on pulmonary shunt and dynamic compliance during abdominal surgery

Spadaro, S., Karbing, D. S., Mauri, T., Marangoni, E., Mojoli, F., Valpiani, G., Carrieri, C., Ragazzi, R., Verri, M., Rees, S. E. & Volta, C. A., 2016, I: British Journal of Anaesthesia. 116, 6, s. 855-861

Inspiratory muscle function following pressure support advice by a decision support system from states of over- and under-support

Spadaro, S., Karbing, D. S., Gioia, A., Moro, F., Dalla Corte, F., Mauri, T., Volta, C. A. & Rees, S. E., 2016, I: Intensive Care Medicine Experimental. 4, Suppl. 1, Part Three, s. 598 A1170.

Intelligent medical monitoring of a patient

Rees, S. E. (Opfinder) & Karbing, D. S. (Opfinder), 2016, IPC nr. G06F 19/00, A61B 5/00, A61B 5/08, A61B 5/145, Patentnr. US2016/0357926, 8 dec. 2016, Prioritetsdato 5 dec. 2014, Prioritetsnr. PCTDK2014050414

Journal of Clinical Monitoring and Computing 2015 end of year summary: respiration

Karbing, D. S., Rees, S. E. & Jaffe, M. B., 2016, I: Journal of Clinical Monitoring and Computing. 30, 1, s. 7-12

Systems and method for identifying the need for measurement of cardiac output

Rees, S. E. (Opfinder) & Karbing, D. S. (Opfinder), 2016, IPC nr. G06F 19/00 (2011.01), A61B 5/083 (2006.01), A61B 5/145 (2006.01), A61B 5/029 (2006.01), A61B 5/1455 (2006.01), A61B 5/00 (2006.01), Patentnr. WO2016110297, 14 jul. 2016, Prioritetsdato 9 jan. 2015, Prioritetsnr. PA 2015 70007

The role of community in the development of elite handball and football players in Denmark

Rossing, N. N., Nielsen, A. B., Elbe, A.-M. & Karbing, D. S., 2016, I: European Journal of Sport Science. 16, 2, s. 237-245

Typical patterns of expiratory flow and carbon dioxide in mechanically ventilated patients with spontaneous breathing

Rees, S. E., Larraza Rico, S., Dey, N., Spadaro, S., Brohus, J. B., Winding, R. W., Volta, C. A. & Karbing, D. S., 2016, I: Intensive Care Medicine Experimental. 4, Suppl. 1, Part Two, s. 315 A612.

VO₂, VCO₂ and VE between-day reliability of the Vynthus CPX metabolic cart during progressive cycling

Poulsen, M. K., Rokkedal-Lausch, T., Larsen, R. G., Thomsen, L. P., Franch, J. & Karbing, D. S., 2016, *Book of Abstracts, 21st Annual Congress of the European College of Sport Science, ECSS, 6-9 July 2016, Vienna, Austria*. European College of Sport Science, s. 411

VO₂, VCO₂ and VE between-day reliability of the Vynthus CPX metabolic cart during progressive cycling

Poulsen, M. K., Rokkedal-Lausch, T., Larsen, R. G., Thomsen, L. P., Franch, J. & Karbing, D. S., 2016.

Relativ alderseffekt i børne- og ungdomshåndbold

Rossing, N. N., Lilholt, R. M. & Karbing, D. S., 26 sep. 2015, Institut for Medicin og Sundhedsteknologi. Aalborg Universitet. 39 s.

Relativ alderseffekt i børne- og ungdomsfodbold

Rossing, N. N., Lilholt, R. M. & Karbing, D. S., 27 aug. 2015, Institut for Medicin og Sundhedsteknologi. Aalborg Universitet. 37 s.

A mathematical model approach quantifying patients' response to changes in mechanical ventilation: evaluation in pressure support

Larraza, S., Dey, N., Karbing, D. S., Jensen, J. B., Nygaard, M., Winding, R. & Rees, S. E., 2015, I: Journal of Critical Care. 30, 5, s. 1008-1015

A mathematical model approach quantifying patients' response to changes in mechanical ventilation: evaluation in volume support

Larraza, S., Dey, N., Karbing, D. S., Jensen, J. B., Nygaard, M., Winding, R. & Rees, S. E., 2015, I: Medical Engineering & Physics. 37, 4, s. 341-349

Decision support system for lung ventilator settings

Rees, S. E. (Opfinder) & Karbing, D. S. (Opfinder), 2015, IPC nr. A61B5/00, A61B5/08, A61M16/00, Patentnr. WO2015070877 (A1), 21 maj 2015

Diffusion capacity of the lung for carbon monoxide: a potential marker of impaired gas exchange or of systemic deconditioning in chronic obstructive lung disease?

Weinreich, U. M., Thomsen, L. P., Brock, C., Karbing, D. S. & Rees, S. E., 2015, I: Chronic Respiratory Disease. 12, 4, s. 357-364

Electrical activity of the diaphragm during progressive cycling exercise in endurance-trained men

Poulsen, M. K., Thomsen, L. P., Mifsud, N. L., Nielsen, N.-P. B., Jørgensen, R. M., Kjærgaard, S. & Karbing, D. S., 2015, I: Respiratory Physiology & Neurobiology. 205, s. 77-83

It is your teammates not your schoolmates that matters: the importance of risk population in talent development studies

Rossing, N. N., Flattum, A., Biegel, A. & Karbing, D. S., 2015, *Book of Abstracts, 20th Annual Congress of the European College of Sport Science, ECSS, 24-27 June 2015, Malmö, Sweden*. European College of Sport Science, s. 194

Journal of Clinical Monitoring and Computing 2014 end of year summary: respiration

Karbing, D. S., Rees, S. E. & Jaffe, M. B., 2015, I: Journal of Clinical Monitoring and Computing. 29, 2, s. 209-215

Measured changes in serial dead space during modification of pressure support

Dey, N., Larraza Rico, S., Rees, S. E., Karbing, D. S. & Winding, R. R., 2015, I: Acta Anaesthesiologica Scandinavica. 59, Suppl. 121, s. 30-31, No. O11-05

Model-based advice for mechanical ventilation: from research (INVENT) to product (Beacon Caresystem)

Rees, S. E. & Karbing, D. S., 2015, *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC, 25-29 August 2015, Milan, Italy*. IEEE Press, s. 5331-5334 7319595

Model-based decision support for pressure support mechanical ventilation: implementation of physiological and clinical preference models

Karbing, D. S., Larraza Rico, S., Dey, N., Jensen, J. B., Winding, R. & Rees, S. E., 2015, *9th IFAC Symposium on Biological and Medical Systems BMS 2015, 31 August-2 September 2015, Berlin, Germany*. IFAC Publisher, s. 279-284 (IFAC-PapersOnLine; Nr. 20, Bind 48).

Model-based optimization of PEEP, a strategy and its implementation

Rees, S. E. & Karbing, D. S., 2015, I: Intensive Care Medicine Experimental. 3, Suppl. 1, s. 334-335, No. A681

Prospective evaluation of a decision support system providing advice on pressure support from states of over- and under-support

Spadaro, S., Karbing, D. S., Volta, C. A. & Rees, S. E., 2015, I: Intensive Care Medicine Experimental. 3, Suppl. 1, s. 334, No. A680

Prospective evaluation of a decision support system providing advice on ventilator settings of: Inspiratory oxygen, delivered pressure or volume and frequency

Rees, S. E., Dey, N., Lodahl, D. C., Ciubotariu, A., Pilypaitis, J., Winding, R. R. & Karbing, D. S., 2015, I: Intensive Care Medicine Experimental. 3, Suppl. 1, s. 137, No. A281

Prospective evaluation of a decision support system providing advice on ventilator settings of: Inspiratory oxygen, delivered pressure or volume, frequency and peep

Karbing, D. S., Spadaro, S., Rees, S. E. & Volta, C. A., 2015, I: Intensive Care Medicine Experimental. 3, Suppl. 1, s. 330, No. A672

Relative age effect and birth place effect in Danish national youth football

Rossing, N. N., Flattum, A., Biegel, A. & Karbing, D. S., 2015, *Program and Abstracts, 8th World Congress on Science and Football, WCSF 2015, 20-23 May 2015, Copenhagen, Denmark*. Bangsbo, J. & Krstrup, P. (red.). Department of Exercise and Sport Sciences, University of Copenhagen, s. 100-101, No. S16.3

The road to success: analysing the progression of male handball players and constant year effect in Danish national teams

Lilholt, R. M., Rossing, N. N., Hansen, G., Wrang, C. M. & Karbing, D. S., 2015, *Book of Abstracts, 20th Annual Congress of the European College of Sport Science, ECSS, 24-27 June 2015, Malmö, Sweden*. European College of Sport Science, s. 33-34

X-faktorer i talentudvikling: din hjemegn og din fødselsdag

Rossing, N. N., Hansen, C. & Karbing, D. S., 2015, *Talentudvikling i sport: reflekterede organisationer, gode teams og stærke atleter*. Rossing, N. N., Ryom, K. & Henriksen, K. (red.). Aalborg Universitetsforlag, s. 94-105

Patients' response to changes in ventilator support. A modelling approach

Larraza Rico, S., Dey, N., Karbing, D. S., Nygaard, M., Winding, R. & Rees, S. E., 26 sep. 2014, I: Intensive Care Medicine Experimental. 2, Suppl 1, s. P15 1 s.

A mathematical model for simulating respiratory control during support ventilation modes

Larraza, S., Dey, N., Karbing, D. S., Nygaard, M., Winding, R. & Rees, S. E., 2014, *19th World Congress of The International Federation of Automatic Control, IFAC, 24-29 August 2014, Cape Town, South Africa*. IFAC Publisher, s. 8433-8438

A system and a corresponding method for estimating respiratory drive of mechanically ventilated patients

Rees, S. E. (Opfinder), Karbing, D. S. (Opfinder) & Larraza Rico, S. (Opfinder), 2014, IPC nr. A61M16/00, A61M16/12, Patentnr. WO2014187465, 27 nov. 2014

Changes in computed tomography and ventilation/perfusion mismatch with positive end-expiratory pressure

Karbing, D. S., Panigada, M., Bottino, N., Spinelli, E., Protti, A., Rees, S. E. & Gattinoni, L., 2014, I: Critical Care (Online Edition). 18, Suppl. 1, s. S98, No. P276

Mathematical modelling of pulmonary gas exchange

Karbing, D. S., Kjærgaard, S., Andreassen, S. & Rees, S. E., 2014, *Modelling Methodology for Physiology and Medicine*. Carson, E. & Cobelli, C. (red.). 2 udg. Elsevier, s. 281-309 (Elsevier Insights).

Measuring gas exchange with step changes in inspired oxygen: An analysis of the assumption of oxygen steady state in patients suffering from COPD

Thomsen, L. P., Weinreich, U. M., Karbing, D. S., Wagner, P. D. & Rees, S. E., 2014, I: Journal of Clinical Monitoring and Computing. 28, 6, s. 547-558

Modelling in anaesthesia and intensive care: A special section including papers from IFAC's 8. Symposium on Medical and Biological Systems in Budapest 2012

Andreassen, S., Desaive, T. & Karbing, D. S., 2014, I: Journal of Clinical Monitoring and Computing. 28, 6, s. 499-500

The role of community density in the development of elite handball and football players in Denmark

Rossing, N. N., Nielsen, A., Elbe, A. & Karbing, D. S., 2014, *Book of Abstracts, 19th Annual Congress of the European College of Sport Science, ECSS, 2-5 July 2014, Amsterdam, The Netherlands*. European College of Sport Science, Germany (ECSS), s. 685

Can computed tomography classifications of chronic obstructive pulmonary disease be identified using Bayesian networks and clinical data?

Thomsen, L. P., Weinreich, U. M., Karbing, D. S., Jensen, V. G. H., Vuust, M., Frøkjær, J. B. & Rees, S. E., 2013, I: Computer Methods and Programs in Biomedicine. 110, 3, s. 361-368

Clinical refinement of the automatic lung parameter estimator (ALPE)

Thomsen, L. P., Karbing, D. S., Smith, B. W., Murley, D., Weinreich, U. M., Kjærgaard, S., Toft, E., Thorgaard, P., Andreassen, S. & Rees, S. E., 2013, I: Journal of Clinical Monitoring and Computing. 27, 3, s. 341-350

Integrating mathematical models of pulmonary gas exchange, acid base, and respiratory control for simulation of changes in mechanical ventilation during support modes

Larraza Rico, S., Dey, N., Karbing, D. S., Winding, R., Nygaard, M. & Rees, S. E., 2013, I: Journal of Critical Care. 28, 6, s. e42-e43

Method for calibrating the level of oxygen in respiratory gas related to the level of oxygen in the blood circulation of an individual

Rees, S. E. (Opfinder), Karbing, D. S. (Opfinder) & Thomsen, L. P. (Opfinder), 2013, Patentnr. WO2013127400, 6 sep. 2013

Model-based measurement of gas exchange in healthy subjects using ALPE Essential: influence of age, posture and gender

Karbing, D. S., Thomsen, L. P., Moesgaard, J., Andreassen, S., Toft, E., Thorgaard, P. & Rees, S. E., 2013, *35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, IEEE EMBS, 3-7 July 2013, Osaka, Japan*. IEEE Press, s. 2441-2444 (IEEE Engineering in Medicine and Biology Society. Conference Proceedings).

A stratified model of pulmonary gas exchange

Mogensen, M. L., Karbing, D. S., Steinle, K. L., Rees, S. E. & Andreassen, S., 2012, *8th IFAC Symposium on Biological and Medical Systems (2012)*. Benyo, B., Andreasen, S., Feng, D. D., Carson, E., Chase, J. G. & Kovács, L. (red.). Elsevier, s. 512-517 6 s. (Elsevier IFAC Publications / IFAC Proceedings series, Bind 8).

Electrical activity of the diaphragm in trained subjects during progressive cycling to exhaustion trials

Karbing, D. S., Mifsud, N. L., Jørgensen, R. M., Poulsen, M. K., Nielsen, N.-P. B. & Thomsen, L. P., 2012, I: Medicine and Science in Sports and Exercise. 44, 5S, Suppl. 2, s. 568, No. 2250

Measuring gas exchange with step changes in inspired oxygen: an analysis of the assumption of oxygen steady state

Thomsen, L. P., Weinreich, U. M., Karbing, D. S. & Rees, S. E., 2012, *8th IFAC Symposium on Biological and Medical Systems (2012)*. Benyo, B., Andreasen, S., Feng, D. D., Carson, E., Chase, J. G. & Kovács, L. (red.). Elsevier, s. 507-511 5 s. (Elsevier IFAC Publications / IFAC Proceedings series, Bind 8).

Retrospective evaluation of a decision support system for controlled mechanical ventilation

Karbing, D. S., Allerød, C., Thomsen, L. P., Espersen, K., Thorgaard, P., Andreassen, S., Kjærgaard, S. & Rees, S. E., 2012, I: Medical & Biological Engineering & Computing. 50, 1, s. 43-51 9 s.

The automatic lung parameter estimator for measuring oxygen and carbon dioxide gas exchange

Karbing, D. S. (Opfinder), Andreassen, S. (Opfinder), Lindholt, C. (Opfinder) & Rees, S. E. (Opfinder), 2012, Patentnr. WO2012069051, 31 maj 2012

Use of the invent system for standardized quantification of clinical preferences towards mechanical ventilator settings
Allerød, C., Karbing, D. S., Thorgaard, P., Andreassen, S., Kjærgaard, S. & Rees, S. E., 11 apr. 2011, I: Journal of Clinical Monitoring and Computing. 25, 1, s. 22-24 3 s., 17.

A model of perfusion of the healthy human lung

Mogensen, M. L., Steimle, K. L., Karbing, D. S. & Andreassen, S., 2011, I: Computer Methods and Programs in Biomedicine. 101, 2, s. 156-165

A model of ventilation of the healthy human lung

Steimle, K. L., Mogensen, M. L., Karbing, D. S., de la Serna, J. B. & Andreassen, S., 2011, I: Computer Methods and Programs in Biomedicine. 101, 2, s. 144-155

Minimal modeling of pulmonary gas exchange of oxygen and carbon dioxide—modeling complexity required in intensive care patients

Karbing, D. S., Kjærgaard, S., Andreassen, S., Espersen, K. & Rees, S. E., 2011, I: Intensive Care Medicine. 37, Suppl. 1, s. S102, No. 0386

Minimal model quantification of pulmonary gas exchange in intensive care patients

Karbing, D. S., Kjærgaard, S., Andreassen, S., Espersen, K. & Rees, S. E., 2011, I: Medical Engineering & Physics. 33, 2, s. 240-248 9 s.

Model-based medical decision support: A road to improved diagnosis and treatment?

Andreassen, S., Karbing, D. S., Pielmeier, U., Rees, S. E., Zalounina, A., Sanden, L. R., Paul, M. & Leibovici, L., 2011, I: International Federation for Medical and Biological Engineering Proceedings. 34, s. 257-260

Selected abstracts presented at the 21st Meeting of the European Society for Computing and Technology in Anaesthesia and Intensive Care (ESCTAIC)

van Dusseldorf, A. A. (Redaktør), Boer, C. (Redaktør), Karbing, D. S. (Redaktør), Krummreich, L. (Redaktør), Rees, S. E. (Redaktør) & Loer, S. A. (Redaktør), 2011, I: Journal of Clinical Monitoring and Computing. 25, 1, s. 3-43

The effect of arteriolar resistance on perfusion distribution in a model of the pulmonary perfusion

Mogensen, M. L., Karbing, D. S. & Andreassen, S., 2011, *Proceedings of the 18th World Congress of the International Federation of Automatic Control, 28 August-2 September 2011, Milano, Italy*. Bittanti, S., Cenedese, A. & Zampieri, S. (red.). IFAC Publisher, s. 5018-5023

The Intelligent Ventilator project: application of physiological models in decision support

Rees, S. E., Karbing, D. S., Allerød, C., Toftgaard, M., Thorgaard, P., Toft, E., Kjærgaard, S. & Andreassen, S., 2011, I: Lecture Notes in Computer Science. 6747, s. 149-158 10 s.

Tidal breathing model describing end-tidal, alveolar, arterial and mixed venous CO₂ and O₂

Poulsen, P., Karbing, D. S., Rees, S. E. & Andreassen, S., 2011, I: Computer Methods and Programs in Biomedicine. 101, 2, s. 166-172

Variability of preference toward mechanical ventilator settings: A model-based behavioral analysis

Allerød, C., Karbing, D. S., Thorgaard, P., Andreassen, S., Kjærgaard, S. & Rees, S. E., 2011, I: Journal of Critical Care. 26, 6, s. 637.e5-637.e12 12 s.

A mathematical physiological model of the dynamics of pulmonary ventilation

Mogensen, M. L., Thomsen, L. P., Karbing, D. S., Steimle, K. L., Zhao, Y., Rees, S. E. & Andreassen, S., 2010, *Proceedings of the UKACC International Conference on Control, CONTROL 2010 [CD-ROM]*. s. 734-739

INVENT - a decision support system for managing inspired oxygen: prospective evaluation in an intensive care unit

Karbing, D. S., Allerød, C., Thorgaard, P., Andreassen, S., Kjærgaard, S. & Rees, S. E., 2010, I: Journal of Clinical Monitoring and Computing. 24, 1, s. 17, No. 14

Prospective evaluation of a decision support system for setting inspired oxygen in intensive care patients
Karbing, D. S., Allerød, C., Thorgaard, P., Carius, A.-M., Frilev, L., Andreassen, S., Kjærgaard, S. & Rees, S. E., 2010, I: Journal of Critical Care. 25, 3, s. 367-374 8 s.

Respiration: et grænsefladeproblem

Bernardino de la Serna, J., Karbing, D. S. & Bagatolli, L., 2010, I: Medicinsk Teknologi og Informatik. 7, 1, s. 16-20

The effect of tissue elastic properties and surfactant on alveolar stability

Andreassen, S., Steimle, K. L., Mogensen, M. L., de la Serna, J. B., Rees, S. E. & Karbing, D. S., 2010, I: Journal of Applied Physiology. 109, 5, s. 1369-1377 9 s.

A mathematical physiological model of the pulmonary capillary perfusion

Mogensen, M. L., Steimle, K. L., Karbing, D. S. & Andreassen, S., 2009, I: Elsevier IFAC Publications / IFAC Proceedings series. s. 157-162

A mathematical physiological model of the pulmonary ventilation

Steimle, K. L., Mogensen, M. L., Karbing, D. S., Bernardino de la Serna, J., Smith, B. W., Vacek, O. & Andreassen, S., 2009, I: Elsevier IFAC Publications / IFAC Proceedings series. s. 222-227

MCBMS'09 i Aalborg: 7th IFAC Symposium on Modeling and Control in Biomedical Systems (including Biological Systems)

Karbing, D. S., 2009, I: Medicinsk Teknologi og Informatik. 6, 5, s. 21-22

Physiological models of gas exchange in decision support of mechanical ventilation: prospective evaluation in an intensive care unit

Karbing, D. S., 2009, Aalborg: Center for Model-based Medical Decision Support. Department of Health Science and Technology. Aalborg University.

Tidal breathing model describing end-tidal, alveolar, arterial and mixed venous CO₂ and O₂

Poulsen, P., Karbing, D. S., Rees, S. E. & Andreassen, S., 2009, *7th IFAC Symposium on Modelling and Control in Biomedical Systems (including Biological Systems) MCBMS'09 - Proceedings*. PART 1 udg. IFAC Secretariat, s. 139-144 6 s. (IFAC Proceedings Volumes (IFAC-PapersOnline); Nr. PART 1, Bind 7).

Tidal breathing model describing end-tidal, alveolar, arterial and mixed venous CO₂ and O₂

Poulsen, P., Karbing, D. S., Rees, S. E. & Andreassen, S., 2009, I: Elsevier IFAC Publications / IFAC Proceedings series. s. 139-144

A decision support system for suggesting ventilator settings: retrospective evaluation in cardiac surgery patients ventilated in the ICU

Allerød, C., Rees, S. E., Rasmussen, B. S., Karbing, D. S., Kjærgaard, S., Thorgaard, P. & Andreassen, S., 2008, I: Computer Methods and Programs in Biomedicine. 92, 2, s. 205-212 7 s.

Authors' response to Mohamad F El-Khatib's and Gassan W Jamaleddine's letter: Clinical relevance of the PaO₂/FiO₂ ratio

Karbing, D. S. & Rees, S. E., 2008, I: Critical Care. 12, 1, 2 s.

Decision support of inspired oxygen fraction using a model of oxygen transport

Karbing, D. S., Kjærgaard, S., Smith, B. W., Allerød, C., Espersen, K., Andreassen, S. & Rees, S. E., 2008, I: Elsevier IFAC Publications / IFAC Proceedings series. s. 8080-8084

Kan et beslutningsstøttesystem indstille en respirator?

Karbing, D. S., 2008, I: Medicinsk Teknologi og Informatik. 5, 4, s. 12-14

Retrospective evaluation of a decision support system for advising on ventilator settings in patients with ARDS/ALI
Allerød, C., Kjærgaard, S., Karbing, D. S., Espersen, K. & Rees, S. E., 2008, I: Intensive Care Medicine. 34, Suppl. 1, s. S75, No. 0283

Retrospective evaluation of a decision support system for advising on ventilator settings in patients with ARDS/ALI
Allerød, C., Karbing, D. S. & Kjærgaard, S. C., 2008, I: DASINFO. 16, 4, s. 48

Variation in the $\text{PaO}_2/\text{FiO}_2$ ratio with FiO_2 : is it relevant?

Karbing, D. S., Kjærgaard, S., Smith, B. W., Espersen, K., Andreassen, S. & Rees, S. E., 2008, I: Journal of Clinical Monitoring and Computing. 22, 3, s. 250-251

Changes in PEEP and pulmonary gas exchange: bedside evaluation

Kjærgaard, S., Karbing, D. S., Espersen, K., Reiter, N., Christensen, M., Smith, B. W. & Rees, S. E., 2007, *Abstracts og Program, Forskningens Dag 2007 Aalborg Sygehus, Århus Universitetshospital, 20. september 2007, Aalborg, Danmark.* s. 57-58, No. 55

Changes in PEEP and pulmonary gas exchange: bedside evaluation

Kjærgaard, S., Karbing, D. S., Espersen, K., Reiter, N., Christensen, M., Smith, B. W. & Rees, S. E., 2007, I: Intensive Care Medicine. 33, Suppl. 2, s. S143, No. 0549

Evaluation of the intelligent ventilator (INVENT) system for optimizing inspired oxygen fraction in intensive care

Karbing, D. S., Kjærgaard, S., Smith, B. W., Allerød, C., Espersen, K., Reiter, N., Christensen, M., Andreassen, S. & Rees, S. E., 2007, I: Intensive Care Medicine. 33, Suppl. 2, s. S233, No. 0905

Examining the effect of positive end-expiratory pressure on gas exchange and lung mechanics

Karbing, D. S., Smith, B. W., Kjærgaard, S., Allerød, C., Andreassen, S. & Rees, S. E., 2007, I: Journal of Clinical Monitoring and Computing. 21, 3, s. 187-188

Modelling the relationship between gas exchange and lung mechanics

Karbing, D. S., Smith, B. W., Rees, S. E. & Andreassen, S., 2007, I: Journal of Clinical Monitoring and Computing. 21, 3, s. 188-189

Quantitative assessment of pulmonary shunt and ventilation-perfusion mismatch without a blood sample

Smith, B. W., Rees, S. E., Karbing, D. S., Kjærgaard, S. & Andreassen, S., 2007, *Sciences and Technologies for Health, Proceedings of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, in conjunction with the Biennial Conference of the French Society of Biological and Medical Engineering (SFGBM), 23-26 August 2007, Lyon, France [CD-ROM]. Electrical Engineering/Electronics, Computer, Communications and Information Technology Association,* s. 4255-4258 4 s.

Variation in the $\text{PaO}_2/\text{FiO}_2$ ratio with FiO_2 : mathematical and experimental description, and clinical relevance

Karbing, D. S., Kjærgaard, S., Smith, B. W., Espersen, K., Allerød, C., Andreassen, S. & Rees, S. E., 2007, I: Critical Care. 11, 6, 8 s.

Variation in the $\text{PaO}_2/\text{FiO}_2$ ratio with FiO_2 : is it relevant?

Karbing, D. S., Kjærgaard, S., Smith, B. W., Espersen, K., Andreassen, S. & Rees, S. E., 2007, *Joint SCATA ESCTAIC Scientific Meeting, 21-23 November 2007, London, United Kingdom.* s. 35-36

Getting the most from clinical data through physiological modelling and medical decision support

Smith, B. W., Rees, S. E., Christensen, T. F., Karbing, D. S. & Andreassen, S., 2006, I: Journal of Clinical Monitoring and Computing. 20, 2, s. 128-129

Aktiviteter

Dansk Medicoteknisk Landsmøde

Karbing, D. S. (Oplægsholder)

19 sep. 2007 → 20 sep. 2007

Presse/medie

Børn født sent på året har dårligere chancer for at få succes i fodbold

Rossing, N. N., Lilholt, R. M. & Karbing, D. S.

02/02/2022

1 element af Mediedækning

Computerprogram skal holde liv i intensivpatienter

Karbing, D. S.

26/06/2009

1 element af Mediedækning

Computerprogram skal holde liv i intensivpatienter

Karbing, D. S.

01/06/2009

1 element af Mediedækning

Kunstig intelligens ind på sygestuen

Rees, S. E. & Karbing, D. S.

04/09/2018

2 elementer af Mediedækning

Mediko: Software kan hjælpe patienter hurtigere ud af respiratoren

Karbing, D. S.

19/06/2009

1 element af Mediedækning

Nødrespirator klar til verden

Thomsen, L. P., Hansen, J., Karbing, D. S., Rees, S. E. & Poulsen, M. K.

16/04/2020

1 element af Mediedækning

Patienter får skræddersyet respiratorbehandling

Rees, S. E. & Karbing, D. S.

16/01/2015

1 element af Mediedækning

Software kan hjælpe patienter hurtigere ud af respiratoren

Karbing, D. S.

19/06/2009

1 element af Mediedækning

Projekter

CoRESCUE AAU Pandemic Ventilator

Rees, S. E. (Projektleder), Thomsen, L. P. (Projektdeltager), Poulsen, M. K. (Projektdeltager), Hansen, J. (Projektdeltager) & Karbing, D. S. (Projektdeltager)

Uddannelses- og Forskningsministeriet, Poul Due Jensens Fond

01/04/2020 → ...

Relativ alderseffekt i dansk børne- og ungdomsfodbold

Rossing, N. N. (PI (principal investigator)), Lilholt, R. M. (PI (principal investigator)) & Karbing, D. S. (PI (principal investigator))

19/12/2014 → 27/08/2015

Relativ alderseffekt i dansk børne- og ungdomshåndbold

Rossing, N. N. (PI (principal investigator)), Liholt, R. M. (PI (principal investigator)) & Karbing, D. S. (PI (principal investigator))

19/12/2014 → 27/08/2015

The Beacon Caresystem - AI for mechanical ventilation decision support

Rees, S. E. (PI (principal investigator)) & Karbing, D. S. (PI (principal investigator))

01/07/2013 → ...