Patent granted/filed

1. **Bhanu Prakash KN,** Arvind CS and Robin Vinod Vargehese. *Deep Learning based segmentation of Stroke regions in Computer Tomography Scans.* SBIC/Z/11595. **TD Filed** on 10th March 2020.
2. **Bhanu Prakash KN**, Krishna Kath Chitta and Bui Thuy Tien. *Method and System of Segmenting Image of Abdomen of Human into Image segments corresponding to Fat compartments.* PCT/SG2019/050160 has been filed on 26 March 2019
3. Ananthasubramaniam A, **Bhanu Prakash KN**, Thirunavuukarasuu A, YANG Guoliang: *Mobile based framework for clinical emergencies.* BIL/Z/05776, BIL/P/05776/02/SG; SG patent application no. filed 201001347-2 filed on 25 Feb. 2011, Singapore Patent Number: 183115, Grant Date: 13 Sep 2013.
4. GUPTA, Varsha, **Bhanu Prakash KN,** NOWINSKI, Wieslaw Lucjan: Method for identifying a pathological region of a scan such as an ischemic stroke region of an MRI scan. ETPL Ref: BIL/P/04489/02/EP. European Patent Number: 2089851, Filing Date: 05 Dec 2007, Grant Date: 10 Jul 2013.
5. Gupta V, **Bhanu Prakash KN**, Nowinski L: Discriminating infarcts from artifacts in MRI scan data. BIL/P/04941/05/SG, SG Patent Application No. 201004915-3; Based on International Application No. PCT/SG2009/000009, SG Patent Number 163063, Filing Date: 06 Jan 2009, Grant Date: 28 Feb 2013.
6. Gupta V, **Bhanu Prakash KN**, Nowinski WL: *Method for identifying a pathological region of a scan, such as an ischemic stroke region of an MRI scan*. BIL/P/04489/04/US, US Patent Application No. 12/518119, US Patent No. 8369598, Filing Date 5 Dec 2007, Grant Date 5 Feb 2013.
7. VOLKAU, Ihar; **K.N, Bhanu Prakash**; NG, Ting Ting; GUPTA, Varsha: Registering Brain Images by Aligning Reference Ellipses. BIL/P/04287/04/US, US Patent No. 8311359, Granted 13 November 2012, Filing Date 28 June 2007.
8. **Bhanu Prakash KN**, Gupta V, and Nowinski WL: *Segmenting infarct in diffusion weighted imaging volumes*. BIL/P/04381/03/US, US Patent No. 8125223, Granted 28 February 2012, Based on United States of America Patent Application No. 12/311484.
9. Varsha Gupta, **K.N, Bhanu Prakash**, Wieslaw Nowinski: *Method for identifying a pathological region of a scan, such as an ischemic stroke region of an MRI scan.* ETPL Ref: BIL/P/04489/03/SG, Singapore Patent Application No. 200901972-0, Grant Number – 151426, Granted on – 31 Dec 2011.
10. Ihar Volkau, **K.N, Bhanu Prakash**, Ng Ting Ting, Varsha Gupta, Wieslaw Nowinski: *Localization of Brain Landmarks such as the Anterior and posterior commissures based on geometrical fitting.* ETPL Ref: BIL/P/04234/03/SG, Singapore Patent No. 150019 [WO 2008/024082], Grant Number – 150019, Grant Date – 31 Aug 2011.
11. **Bhanu Prakash KN**, Gupta V, and Nowinski WL: *Segmenting infarct in diffusion weighted imaging volumes.* BIL/Z/04381, BIL/P/04381/00/PCT, PCT/SG2006/000292, SG Patent Application No: 200900507-5 filed 3 Oct. 2006. SG patent no. 149541 granted on 31 Dec 2009. www.freepatentsonline.com/EP2074584.html *(former title: Segmentation and identification of infarcts and artifacts in diffusion weighted volumes using energy measures).*
12. **Bhanu Prakash KN**, Nowinski WL: *Automatic detection of anterior and posterior commissure landmarks.* BIL/P//1390/SG; SG Patent Application No: 200808110-1, Priority date: 19 Nov 2003, Singapore patent No.: 147488, Filing date: 1 Nov 2004, Grant date: 29 October 2010.

13. **Bhanu Prakash KN**, Nowinski WL: *Automatic detection of anterior and posterior commissure landmarks.* BIL/P//1390/SG; SG 200306861-6, filed 19 Nov. 2003. WO 2005/048844 A1, 2 Jun. 2005. BIL/P/1390/3195/EP, 04775677.0 (EP) filed on 12 Jun 2006. SG 1691687 published 23 Aug. 2006. US patent publication no: US2007/0076927A1 on 5 April 2007. US Patent no. US7,783,090 granted on 24 Aug.2010 (*former invention title: Automatic detection of anterior and posterior commissures in MR volume data*) www.freepatentsonline.com/y2007/0076927.html
14. Ihar Volkau, **Bhanu Prakash KN**, Ng Ting Ting, Varsha Gupta, Wieslaw Nowinski: Localization of Brain Landmarks such as the Anterior and posterior commissures based on geometrical fitting. Grant Number – US8,045,775, Grant Date – 25 Oct 2011.
15. Nowinski WL, **Bhanu Prakash KN**, Volkau I, Ananthasubramaniam A: *Method and apparatus for atlas-assisted interpretation of magnetic resonance diffusion and perfusion images*. BIL/P//2575/US, BIL/P/2575/2591/US US60/676,888 provisional application filed on 2 May 2005. PCT/SG2006/000113 and US11/415,679, 2 May 2006. SG patent no. 137145 granted on 14 May 2010. US Patent no. US7,783,132 granted on 24 Aug 2010 www.freepatentsonline.com/y2007/0014453.html
16. Nowinski Wieslaw; **Bhanu Prakash K.N**.; Ihar Volkau; Anand Ananthasubramaniam, Method and apparatus for atlas-assisted interpretation of magnetic resonance diffusion and perfusion images. PCT Patent Application No: PCT/SG2006/000113, Filing date: 02 May 2006, Singapore Patent No.: 137145, Grant date: 14 May 2010
17. **Bhanu Prakash KN**, Volkov I, Nowinski WL: *Locating a mid-sagittal plane*, BIL/P//1666/US filed on 2 Apr. 2004. BIL/P/1666/2475/PCT. PCT/SG2005/000106 application filed on 1 Apr. 2005. WO 2005/096227 A1 published on 13 Oct. 2005. SG200604563-7 filed on 6 Jun 2006. EP 05722353.9 filed on 1 Apr. 2005. SG patent grant no. 200604563-7 granted on 30 Nov. 2007. www.freepatentsonline.com/y2007/0276219.html

Licensing of patents to industries

1. Mobile based application for Clinical emergency (MBACE) licensed to Wellness Pte. Ltd.
2. Brain CAD licensed to iRadsolutions Pte. Ltd
3. Stroke CAD.

Book chapters

1. **Bhanu Prakash KN**, Jadegoud Yaligar, Sanjay K Verma, Venkatesh Gopalan, Sendhil Velan S "Rodent abdominal adipose tissue imaging by MR". ***Preclinical MRI: Methods and Protocols (Springer Nature),*** Methods Mol Biol. 2018; 1718:259-268

Editor

1. Guest Editors: **Bhanu Prakash KN,** Shivakumar M**. "Advances in Computational Approaches for Artificial Intelligence, Image Processing, IoT and Cloud Applications." Springer Nature Computer Science.**

Journal Papers

1. Bo Xu Ren, Isaac Huen, Zi Jun Wu, Hong Wang, Meng Yun Duan, Ilonka Guenther, **Bhanu Prakash KN**, Feng Ru Tang. "Early Postnatal Irradiation-induced Age-dependent Changes in Adult Mouse Brain: MRI based Characterization". BMC Neuroscience(submitted) 2020.
2. Smarajit Chakraborty, Wee Kiat Ong, Winifred W. Y. Yau, Zhihong Zhou, **K. N. Bhanu Prakash,** Sue-Anne Toh, Weiping Han, Paul M. Yen & Shigeki Sugii. CD10 marks non-canonical PPARγ-independent adipocyte maturation and browning potential of adipose-derived stem cells. Stem Cell Research & Therapy volume 12, Article number: 109 (2021)
3. Chengxiang Yuan, Tau En Lim, **Bhanu Prakash KN**, Weiping Han, Shigeki Sugii. "Fast Adipogenesis Tracking System (FATS) – A robust, high throughput, open-source adipogenesis quantification technique". Stem Cell Research & Therapy volume 10, Article number: 38 (2019)
4. Fok-Moon Lum, Wei Zhang, Kheng-Choon Lim, Benoit Malleret, Teck-Hui Teo, Jun-Jia Koh, Kuan J. Lee, Tze-Kwang Chua, Yiu-Wing Kam, Wearn-Xin Yee, Isaac Huen, Jeslin J. L. Tan, Siti Naqiah Amrun**, Bhanu Prakash KN**, Patrick J. Cozzone, Laurent Renia, Philip T. H. Lee & Lisa F. P. Ng. Multimodal assessments of Zika virus immune pathophysiological responses in marmosets. *Sci Rep* **8,** 17125 (2018). https://doi.org/10.1038/s41598-018-35481-6
5. Sofi G Julien, Joanna R Sinnakannu, Reinhard Brunmeir, Wei Ma, Jadegoud Yaligar, **Bhanu Prakash KN**, Sendhil S Velan, Choon Kiat Sim, Jingyi Wu, Wei Xie, Craig McFarlane, Weiping Han & Feng Xu. "***Narciclasine Attenuates Diet-Induced Obesity by Promoting Oxidative Metabolism in Skeletal Muscle".*** *PLOS Biology*. PLoS Biol. 2017 Feb 16; 15(2): e1002597. doi: 10.1371/journal.pbio.1002597
6. **Bhanu Prakash KN**, Hussein Srour, S. Sendhil Velan, Kai-Hsiang Chuang. "***A method for automatic segmentation of Brown Adipose Tissue"***. Magnetic Resonance Materials in Physics, Biology and Medicine**.** Apr; 29(2):287-99, 2016. DOI 10.1007/s10334-015-0517-0
7. **Bhanu Prakash KN**, Sanjay K Verma, Jadegoud Yaligar, Julian Goggi, Venkatesh Gopalan, Swee Shean Lee, Tian Xianfeng, Shigeki Sugii, Melvin Khee Shing Leow, Kishore Bhakoo, S. Sendhil Velan. "***Segmentation and characterization of Interscapular Brown Adipose Tissue in rats by Multi-Parametric Magnetic Resonance Imaging"***. Magnetic Resonance Materials in Physics, Biology and Medicine. Apr; 29(2):277-86, 2016**.** DOI 10.1007/s10334-015-0514-3.
8. Chaurasia B, Kaddai VA, Lancaster GI, Henstridge DC, Sriram S, Galam DL, Gopalan V, **Bhanu Prakash KN**, Velan SS, Bulchand S, Tsong TJ, Wang M, Siddique MM, Yuguang G, Sigmundsson K, Mellet NA, Weir JM, Meikle PJ, Bin M Yassin MS, Shabbir A, Shayman JA, Hirabayashi Y, Shiow ST, Sugii S, Summers SA. "***Adipocyte Ceramides Regulate Subcutaneous Adipose Browning, Inflammation, and Metabolism"***. *Cell Metabolism*. 2016 Oct 21. pii: S1550-4131(16)30533-2. doi: 10.1016/j.cmet.2016.10.002.
9. Gopalan V, Michael N, Ishino S, Lee SS, Yang AY, **Bhanu Prakash KN**, Yaligar J, Sadananthan SA, Kaneko M, Zhou Z, Satomi Y, Hirayama M, Kamiguchi H, Zhu B, Horiguchi T, Nishimoto T, Velan SS. "***Effect of Exercise and Calorie Restriction on Tissue Acylcarnitines, Tissue Desaturase Indices, and Fat Accumulation in Diet-Induced Obese Rats"***. *Scientific Reports*. 2016 May 20; 6:26445. doi: 10.1038/srep26445.
10. Sanjay Kumar Verma, Enci Mary Kan, Jia Luc, Kian Chye Ng, Eng Ang Lingc Sankar Seramani, **Bhanu Prakash KN**, Yong Chiat Wong, Mui Hong Tan, S. Sendhil Velan. "***Multi-echo Susceptibility Weighted Imaging of Open Field Blast-induced Traumatic Brain Injury in a Rat Model"***. NMR Biomed. 2015; 28: 1069–1077**.**

11. Sadananthan SA, **Bhanu Prakash KN**, Melvin K-S Leow, ChinMeng Khoo, Hong Chou, Kavita Venkataraman, Eric Khoo Yin Hao, Yung Seng Lee, Peter Gluckman, E Shyong Tai, and S. Sendhil Velan. ***"Automated segmentation of visceral and subcutaneous (deep and superficial) adipose tissues and evaluation on normal and overweight Chinese men".*** *Journal of Magnetic Resonance Imaging*, 41(4): 924-34, 2015.
12. **Bhanu Prakash KN**, Gopalan V, Lee SS, Velan SS. ***"Quantification of abdominal fat depots in rats and mice during obesity and weight loss interventions".*** *PLoS One*. 2014 Oct 13; 9(10): e108979. doi: 10.1371/journal.pone.0108979. eCollection 2014.
13. Diego A Miranda, Ji-Hyun Kim, Cheng Wang, Long N Nguyen, Bryan C.T. Tan, Vera J Goh, Jolene S.Y. Tan, Jadegoud Yaligar **Bhanu K.N. Prakash**, S. Sendhil Velan, Hongyan Wang, David L. ***"Fat Storage-Inducing Transmembrane Protein 2 is required for normal fat storage in adipose tissue"*** The Journal of Biological Chemistry, Feb 2014.
14. **Bhanu Prakash KN**, Hu J, Morgan T, Hanley DM, Nowinski WL: "*Comparison of three segmentation techniques for intra – ventricular and intra – cerebral haemorrhages in unenhanced CT scans"*. Journal of Computer Assisted Tomography, 2012; Jan-Feb, 36: 109-120.
15. **Bhanu Prakash KN**, Shi Zhou, Morgan T, Hanley DM, Nowinski WL*: "Segmentation and Quantification of Intra- ventricular/ cerebral Haemorrhage in CT scans by Modified Distance Regularized Level Set Evolution technique".* International Journal of Computer Assisted Radiology and Surgery September 2012, Volume 7, Issue 5, pp 785-798.
16. **Bhanu Prakash KN**, T.C. Morgan, D.M. Hanley, W.L. Nowinski: "*A Brain Parenchyma Model-Based Segmentation of Intraventricular and Intracerebral Haemorrhage in CT Scans".* The Neuroradiology Journal" Vol. 2 No. 9, May 15, 2012, 317-326.
17. I. Volkau, F. Puspitasari, T.T. Ng, K.N. Bhanu Prakash, V. Gupta, W.L. Nowinski. *"A Simple and Fast Method of 3D Registration and Statistical Landmark Localization for Sparse Multi-Modal/Time-Series Neuroimages Based on Cortex Ellipse Fitting".* The Neuroradiology Journal, Vol. 2, No. 3, Feb 15, 2012, 63-76.
18. **Bhanu Prakash KN**, Gupta V, Hu J, and Nowinski WL: ***"Automatic processing of diffusion-weighted ischemic stroke images based on divergence measures: slice and hemisphere identification, and stroke region segmentation".*** International Journal of Computer Assisted Radiology and Surgery 2008, 3(6): 559-570.
19. Gupta V, **Bhanu Prakash KN**, and Nowinski WL: ***"Towards discrimination of infarcts from artifacts in DWI scans".*** International Journal of Computer Assisted Radiology and Surgery 2008, 2(6):385-395.
20. Nowinski WL, Qian G, **Bhanu Prakash KN**, Volkau I, A. Thirunavuukarasuu, Hu Q, A. Ananthasubramaniam, Liu J, Gupta V, Ng TT, Leong WK, Beauchamp NJ: ***"A CAD system for acute ischemic stroke image processing".*** International Journal of Computer Assisted Radiology and Surgery 2007, 2(Suppl. 1):220-222.
21. Nowinski WL, Qian G, **Bhanu Prakash KN**, Volkau I, Leong WK, Huang S, Ananthasubramaniam A, Liu J, Ng TT, Gupta V. ***"Stroke Suite: CAD systems for acute ischemic stroke, hemorrhagic stroke, and stroke in ER".*** Medical Imaging and Informatics. Lecture notes in Computer Science, Springer. Vol. 4987, 2008: 377 - 386.
22. **Bhanu Prakash KN**, Gupta V, Bilello M, Beauchamp NJ, and Nowinski WL: ***"Identification, segmentation and image property study of acute infarcts in diffusion-weighted images by using a probabilistic neural network and adaptive Gaussian mixture model".*** Academic Radiology 2006, 13(12):1474-1484.

23. Volkau I, **Bhanu Prakash K.N.**, Anand A, Aziz A, Nowinski WL: ***"Extraction of the midsagittal plane from morphological neuroimages using the Kullback-Leibler's measure".*** Medical Image Analysis, 10(6): 863-874.
24. Nowinski WL, Qian G, **Bhanu Prakash KN**, Thirunavuukarasuu A, Hu QM, Ivanov N, Parimal AS, Runge VL, and Beauchamp NJ: ***"Analysis of ischemic stroke MR images by means of brain atlases of anatomy and blood supply territories".*** Academic Radiology 2006; 13 (8):1025-1034.
25. Nowinski WL, Qian GY, **Bhanu Prakash KN**, Volkau I, Hu Q, Thirunavuukarasuu A, Nick Ivanov, A.S. Parimal, Qiao Y, Ananthasubramaniam A, Huang S, Runge VM, and Beauchamp NJ: ***"Design and development of a computer aided diagnosis system for processing of acute ischemic stroke MR images".*** WSEAS Transactions on Biology and Biomedicine 2006; 3(6):401-407.
26. Nowinski WL, Qian G, **Bhanu Prakash KN**, Hu Q, Aziz A: *Fast Talairach Transformation for magnetic resonance neuroimages.* Journal of Computer Assisted Tomography 2006; 30 (4): 629-641.
27. Volkau I, **Bhanu Prakash KN**, Aziz A, Ananthasubramaniam A, Nowinski WL: ***"Quantitative analysis of brain asymmetry by using the divergence measure: Normal-pathological brain discrimination".*** Academic Radiology 2006; 13(6):752-758.
28. Nowinski WL, **Bhanu Prakash KN**, Volkau I, Ananthasubramaniam A, Beauchamp NJ: ***"Rapid and automatic calculation of the midsagittal plane in magnetic resonance diffusion and perfusion images".*** Academic Radiology 2006; 13(5): 652-663.
29. **Bhanu Prakash KN**, Nowinski WL, *Morphological relationship among the corpus callosum, fornix, anterior commissure and posterior commissure: MRI-based variability study.* Academic Radiology 2006; 13(1): 24-35.
30. Nowinski WL, **Bhanu Prakash KN**: ***"Dorso-ventral extension of the Talairach transformation and its automatic calculation for MR Neuroimages".*** Journal of Computer-Assisted Tomography 2005; 29(6):863-879.
31. **Bhanu Prakash KN**, Hu Q, Aziz A, Nowinski WL: *Rapid and automatic localization of the anterior and posterior commissure point landmarks in MR volumetric neuroimages.* Academic Radiology 2006; 13(1): 36-54.
32. **K. N. Bhanu Prakash**, A. G. Ramakrishnan, S.Suresh and Teresa P Chow: ***"An Investigation into the feasibility of fetal lung maturity prediction using Statistical Textural Features."*** Ultrasonic Imaging, No. 22, 2001, pp., 39-54.
33. **K. N. Bhanu Prakash**, A. G. Ramakrishnan, S. Suresh and Teresa P Chow: "***Fetal Lung Maturity Analysis using Ultrasound Image Features***." IEEE Trans. On Information Technology in Biomedicine 2002; Volume 6(1): 38-45.
34. M. N. Ramesh**, K. N. Bhanu Prakash**, et al., ***"Performance evaluation of a Microprocessor based Retort control system"***. Journal of Instrument Society of India 1995; Volume 25 (3 & 4): 128-135.

Abstract in Journals

1. Nowinski WL, Hu Q, **Bhanu Prakash KN**, Volkau I, Qian G, Thirunavuukarasuu A, Liu J, Aziz A, Baimouratov R, Hou Z, Huang S, Luo S, Minoshima S, Runge V, Beauchamp N: Atlas-assisted analysis of brain scans. Book of Abstracts of European Congress of Radiology ECR 2005, 4-8 March 2005, Vienna, Austria. European Radiology, Supplement 1 to Volume 15, Feb 2005:572.

Conference papers and abstracts at top clinical and medical education meetings.

1. Ling Yun Yeow, Krishna Kanth Chitta, Leon, Ling Ling Chan, **Bhanu Prakash KN**. "***Differentiating Predominant Gait Disorder Parkinsonism Using Automated Geometric Indices"***. ISMRM 2020.
2. Zhang Jiayi, Geetha Soujanya Chilla, Chew Qian Hu2, Lee Liebin Daryl Renick, Kuan Jin Lee, Sim Kang, **Bhanu Prakash K.N**. "***Characterisation of structural underpinnings of functional connectivity differences in schizophrenia." OHBM Conference, 2020.***
3. Isaac Huen, Krishna Kanth Chitta, Kuan Jin Lee, Philip Lee, Kheng Choon Lim, Lisa F. P. Ng, and **Bhanu Prakash KN. '*Atlas-based brain extraction for bias field-affected structural imaging demonstrated using MPRAGE in marmoset*'** *- ISMRM 2018*
4. Krishna Kanth Chitta, Abdalla Z Mohamed, Fatima Nasrallah, and **Bhanu Prakash KN.** '***Deep Learning approach for Automatic Segmentation and characterization of Traumatic Brain Injury using Multi-parametric MRI'*** *– ISMRM 2018*
5. **Bhanu Prakash KN**, Sanjay Verma, Andrew Maudsley, Sendhil Velan S. "***Brain Metabolism and Temperature Assessment in Traumatic Brain Injury Subjects Using 3D Echo-Planar Spectroscopic Imaging" –*** *ISMRM 2017*
6. **Bhanu Prakash KN**, Sanjay Verma, Suresh Sadananthan, Venkatesh Gopalan, Jadegoud Yaligar, Sankar Seramani, Andrew Maudsley, Sendhil Velan S. "***Temperature Calibration and Errors Assessed by Magnetic Resonance Spectroscopy" –*** *ISMRM 2017*
7. Krishna Kanth Chitta, **Bhanu Prakash KN**, Suresh Sadananthan, Sendhil Velan S. "***Biased Fuzzy C Means Based Intensity Inhomogeneity Correction for Segmentation of Abdominal Fat in DIXON MR Images" --- ISMRM 2017***
8. Isaac Huen, Krishna Kanth Chitta, Phua Hwee Tang, Ah Moy Tan, **Bhanu Prakash KN. "*Automated Paediatric Brain Tumour Grading using T2-weighted MR Image derived Textural and Tissue composition features" –*** *RadiologyAsia 2017* ***– Best oral presentation***
9. Venkatesh Gopalan, Sanjay Kumar Verma, Jadegoud Yaligar, Anantharaj Rengaraj, Tian Xianfeng, **Bhanu Prakash KN**, Suresh Anand Sadananthan, Navin Michael, and S. Sendhil Velan. ***"Metabolic Imaging of Aging Adipose Tissues" –*** *ISMRM 2017*
10. Yaligar Jadegoud, Sanjay Kumar Verma, Venkatesh Gopalan, Anantharaj Rengaraj, Tian Xianfeng, Anna Ulyanova, **Bhanu Prakash KN**, Suresh Anand Sadananthan, Navin Michael, Velan, S. Sendhil. ***"Metabolic Imaging of ß3-Adrenoreceptor Activated BAT and Its Systemic Effect on Abdominal Fat in Diet Induced Obese Model"*** *-- ISMRM 2017*
11. **Bhanu Prakash KN**, Hussein Srour, Sanjay K Verma, Jadegoud Yaligar, Venkatesh Gopalan, Swee Shean Lee, Kai Hsiang Chuang, Sendhil Velan S. "***An Automatic machine learning approach for multi-parametric MR based brown adipose tissue characterization and segmentation in mice and rats"***. Proceedings of 24th ISMRM, Singapore, 2016. (Oral).
12. **Bhanu Prakash KN**, Venkatesh Gopalan, Swee Shean Lee, Sendhil Velan S. ***Assessment of Fat Accumulation and Mobilization during obesity and weight-loss Interventions in Rodents***. Proceedings of 24th ISMRM, Singapore, 2016.
13. Gopalan V, Yaligar Jadegoud, Michael Navin, Shean Lee, Anand Sadananthan Suresh, Ulyanova Anna , **Bhanu Prakash KN**, Velan S Sendhil. ***Dietary Fat Content Modulates the Effect of Long-Term Exercise on Intramyocellular and Intrahepatic Lipids but Not on Weight or Insulin Sensitivity***. Proceedings of 24th ISMRM, Singapore, 2016.
14. Sanjay Kumar Verma, Nagashima Kaz, Lee Swee Shean, Xian Feng Tian, Yaligar Jadegoud, Gopalan Venkatesh, Bhanu **Prakash KN**, Velan S. Sendhil. ***Diffusion Spectroscopy of White and Brown Adipose Tissues***. Proceedings of 24th ISMRM, Singapore, 2016.

15. Sanjay Kumar Verma, **Bhanu Prakash KN**, Yaligar Jadegoud, Goggi Julian, Gopalan Venkatesh, Lee Swee Shean, Xianfeng Tian, Sugii Shigeki, Shing Leow Melvin Khee , Bhakoo Kishore, Velan S. Sendhil ***Longitudinal Evaluation of Brown Adipose Tissues in Rats by Multi-Modal Imaging***. Proceedings of 24th ISMRM, Singapore, 2016.
16. Yaligar Jadegoud, Sanjay Kumar Verma, **Bhanu Prakash KN**, Tian Xianfeng, Venkatesh Gopalan, Lee Swee Shean, Sadananthan Suresh Anand, Michael Navin, Kiat Ong Wee, Sugii Shigeki, Velan S Sendhil. ***Longitudinal Imaging of Interscapular Brown Adipose Tissues in High Fat Diet Induced Obese Rats***. Proceedings of 24th ISMRM, Singapore, 2016.
17. **Bhanu Prakash KN**, Sanjay Kumar Verma, Yevgen Marchenko, Suresh Anand Sadananthan, Yang Ming, Sein Lwin, Charmaine Childs, Yeo Tseng Tsai, Lu Jia, Andrew Maudsley, and Sendhil Velan S. ***3D Echo-Planar Spectroscopic Imaging based Metabolic Imaging and Assessment of Whole Brain Temperature in Brain Injuries*****. Oral presentation,** ISMRM 2015. Abstract No. 1069
18. Jadegoud Yaligar, **Bhanu Prakash KN**, Brayn Tan, Swee Shean Lee, Venkatesh Gopalan, David Lawrence Silver, and S Sendhil Velan. ***Modulation of the abdominal and hepatic fat by adipose-specific fat-storage inducing transmembrane2 (FIT2) protein***. ISMRM 2015. Abstract No. 4121.
19. Sanjay Verma, **Bhanu Prakash KN**, Sankar Seramani, Enci Mary Kan, Kian Chye Ng, Mui Hong Tan, Jia Lu, and S Sendhil Velan. ***A Comparative Study of Diffuse and Focal Traumatic Brain Injury using Multi-echo Susceptibility Weighted Imaging in Rodent Model***. ISMRM 2015. Abstract No. 1412.
20. Venkatesh Gopalan, Navin Michael, S S. Lee, Yaligar J, **Bhanu Prakash KN**, S Sendhil Velan. ***Modulation of Ectopic Fat and SCD Activity During Weight Loss Interventions in High Saturated Fat Diet Induced Obese Rats by In-Vivo MRS and LC-MS***. ISMRM 2015. Abstract No. 4120.
21. **Bhanu Prakash KN**, Sanjay K Verma, Yevgen Marchenko, Sankar Seramani, Suresh Anand Sadananthan, Navin Michael, Charmaine Childs, Lu Jia, Andrew A. Maudsley, and Sendhil Velan S. ***Echo planar spectroscopic imaging based temperature calibration at 7T and 3T for whole brain temperature measurement in rodents and humans***. Abstract # 4140. ISMRM 2014.
22. **Bhanu Prakash KN**, Sanjay K Verma, Yevgen Marchenko, Sankar Seramani, Kan Enci Mary, Charmaine Childs, Lu Jia, Andrew A Maudsley, and Sendhil Velan S. ***Assessment of Whole Brain Temperature in Brain Injuries by 3D Echo-Planar Spectroscopic Imaging***. Abstract # 4049. ISMRM 2014.
23. Sanjay K Verma, , **Bhanu Prakash KN**, Sankar Seramani, Enci Mary Kan, Kian Chye Ng, Mui Hong Tan, Jia Lu, and S Sendhil Velan. ***Diffusion Tensor Imaging of Blast Induced Traumatic Brain Injury in Rodent Model***. Abstract # 5197. ISMRM 2014.
24. Sanjay K Verma, Sankar Seramani, **Bhanu Prakash KN**, Jadegoud Yaligar, Enci Mary Kan, Kian Chye Ng, Jia Lu, and S Sendhil Velan. ***Multi-Modal Neuroimaging and Spectroscopy of Mild and Severe Traumatic Brain Injuries in Rodent Model.*** Abstract # 5522. Submitted to ISMRM 2014.
25. Jadegoud Yaligar, Diego A Miranda, **Bhanu Prakash KN**, David Lawrence Silver, and S Sendhil Velan. ***Modulation of the abdominal visceral and subcutaneous adipose tissue by fat storage-inducing transmembrane (FIT) proteins - An Imaging Study***. Abstract # 1124. ISMRM 2014.
26. Venkatesh Gopalan, S Ishino, Jadegoud Yaligar, **Bhanu Prakash K N**, Swee Shean Lee, Kavita Venkataraman, and S Sendhil Velan. ***Reproducibility of fat measurements in abdomen and liver by MR Imaging and Spectroscopy in High Fat Diet fed rats.*** Abstract # 5967. Submitted to ISMRM 2014.

27. Jadegoud Yaligar, Venkatesh Gopalan, Swee Shean Lee, **Bhanu Prakash KN**, and S Sendhil Velan. ***Investigation of intrahepatic fat and liver glycogen in diet induced fatty liver disease model***. Abstract # 5804. ISMRM 2014.
28. **Bhanu Prakash KN**, Sanjay K Verma, Sankar Seramani, E.M. Kan, Steven Graham, Charmine Childs, J. Lu, and S. Sendhil Velan: ***Longitudinal MR based study of ipsilateral and contralateral hippocampus volume and cognitive assessment in traumatic brain injury rats***. Abstract ID 1054, ISMRM 2013.
29. **Bhanu Prakash KN**, Venkatesh Gopalan, SS Lee, S. Sendhil Velan: ***An automatic segmentation and quantitation technique for abdominal fat from MR images of obese rats***. Abstract ID 1527, ISMRM 2013.
30. Sankar Seramani, **Bhanu Prakash KN,** Sanjay K Verma, K C Ng, EM. Kan, Gopalan V, Michael N, Yaligar J, Graham S, Lu J, Childs C, S. Sendhil Velan: ***Magnetic Resonance Spectroscopy based Temperature Calibration and in-vivo Brain Temperature Measurement of Traumatic Brain Injury Rats at 7 Tesla.*** Abstract ID 1164, ISMRM 2013.
31. Sankar Seramani, Sanjay K Verma, Kian Chye Ng, Mary Kan Enci, **Bhanu Prakash KN**, Tan Mui Hong, Lu J, and S Sendhil Velan: ***Longitudinal Blast Injury Chracterization Using Magnetic Resonance Spectroscopy In Rat Hippocampus***. Abstract ID 2206, ISMRM 2013.
32. Sankar Seramani, Yevgen Marchenko, Sanjay K Verma, **Bhanu Prakash KN**, N Michael, S.A. Sadananthan, Andrew.A Maudsley, and S .Sendhil Velan: ***Metabolic Imaging with 3D Echo Planar Spectroscopic Imaging at 7 Tesla.*** Abstract ID 1859, ISMRM 2013.
33. Sanjay K Verma, Sankar Seramani, **Bhanu Prakash KN**, Enci Mary Kan, Kian Chye Ng, Mui Hong Tan, Jia Lu, and S Sendhil Velan: ***Multi-echo Susceptibility Weighted Imaging of Blast Induced Traumatic Brain Injury in Rodent Model***. Abstract ID 4718, ISMRM 2013.
34. Suresh Anand Sadananthan, **Bhanu Prakash KN**, Melvin K-S Leow, ChinMeng Khoo, Kavita Venkataraman, Eric Khoo Yin Hao, Lee Yung Seng, Peter Gluckman, Tai E Shyong, and S. Sendhil Velan: ***Interethnic differences in abdominal fat (deep, superficial and visceral) accumulation***. Abstract ID 67, ISMRM 2013.
35. Suresh Anand Sadananthan, **Bhanu Prakash KN**, Melvin K-S Leow, ChinMeng Khoo, Kavita Venkataraman, Eric Khoo Yin Hao, Lee Yung Seng, Peter Gluckman, Tai E Shyong, and S. Sendhil Velan: ***Automated technique for the segmentation of deep and superficial subcutaneous adipose tissues: Association with insulin sensitivity in normal and overweight Chinese men***. Abstract ID 66, ISMRM 2013.
36. Venkatesh Gopalan, S. Ishino, S.S. Lee, Y.A. Yang, **Bhanu Prakash KN**, Z. Zhou, M. Kaneko, Y. Nakano, M. Watanabe, T. Horiguchi, B. Zhu, and S. Sendhil Velan: ***MR imaging and spectroscopic investigation of exercise and calorie restriction in high fat diet fed obese rats***. Abstract ID 647, ISMRM 2013.
37. Nowinski WL, Qian GY, **Bhanu Prakash KN**, Gupta V, He J, Poh LE, Lee E, Volkau I, Puspitasari F, Kazmierski R, Ambrosius W, Urbanik A, Chrzan RM, Salvolini U, Polonara G, Mazzoni C, Walecki J, Mol M, Morgan T, Hanley DF: ***A CAD system for stroke CT in Emergency Room***. European Institute for Biomedical Imaging Research (EIBIR) 2011: 4172.
38. **Bhanu Prakash KN**, Ananthasubramaniam A, Nowinski WL: ***iStrokeSuite: an interactive multimedia iPhone/iPad application towards stroke management***. RSNA 96th Scientific Assembly and Annual Meeting, 28 November – 3 December 2010, Chicago, Illinois 2010:557.
39. **Bhanu Prakash KN**, Ananthasubramaniam A, Yang G, Thirunavuukarasuu A, Ambrosius W, Nowinski WL. ***An Interactive Mobile Multimedia System for Clinical Emergencies.*** Accepted for

presentation at 95 Radiological Society of North America Scientific Assembly and Annual Meeting, Chicago, USA, November 29 – December 4, 2009.

40. **Bhanu Prakash KN**, H.U. Jianbo, E.N.G. Poh Lan, Y.I. Wee Ting, T. Morgan, R. Kazmierski, F. Daniel Hanley, L. Wieslaw Nowinski. ***Automatic identification and segmentation of hemorrhagic slices and regions in CT scans***. Journal of the Neurological Sciences, October 2009 (Vol. 285Supplement 1, Page S98, FP26-TU-01).
41. **Bhanu Prakash KN**, H.U. Jianbo, G. Varsha, B. Deepali, C.S. Raymond Seet, L. Wieslaw Nowinski . ***Novel methods for automatic segmentation and quantification of ischemic stroke regions in DWI volumes.*** Journal of the Neurological Sciences, October 2009 (Vol. 285Supplement 1, Pages S71-S72, FP09-MO-05).
42. **Bhanu Prakash KN**, Jianbo HU, Varsha G, Deepali B, Raymond Seet CS, Nowinski WL. ***Novel methods for automatic segmentation and quantification of ischemic stroke regions in DWI volumes.*** 19th World Congress of Neurology, Bangkok, Thailand, October 24 – 30, 2009 (oral presentation).
43. **Bhanu Prakash KN**, Jianbo HU, Poh Lan Eng, Wee Yi Ting, Morgan T, Kazmierski R, Daniel Hanley F, Nowinski WL. ***Automatic identification and segmentation of hemorrhagic slices and regions in CT scans***. 19th World Congress of Neurology, Bangkok, Thailand, October 24 – 30, 2009 (oral presentation).
44. Nowinski WL, Qian G, **Bhanu Prakash KN**, Volkau I, Leong WK, Huang S, Ananthasubramaniam A, Liu J, Ng TT, Gupta V. ***Stroke Suite: CAD systems for acute ischemic stroke, hemorrhagic stroke, and stroke in ER.*** Medical Imaging and Informatics of Lecture Notes in Computer Science 4987, 2008:377-386.
45. Nowinski WL, Guoyu Q, , Beauchamp NJ, Urbanik A, Liebeskind D, Nighoghossian N, **Bhanu Prakash KN**, Volkau I, Huang S, Gupta V, Puspitasari F, Hu J, Liu J, Chrzan R, Marcos A, Berthezene Y, Hermier M, Froment JC, Seet CS: ***A CAD system for ischemic stroke supporting multiple infarct and penumbra definitions and time series acquisitions.*** 94 Radiological Society of North America Scientific Assembly and Annual Meeting, Chicago, USA, November 30 – December 5, 2008.
46. Nowinski WL, Beauchamp NJ, **Bhanu Prakash KN**, Liu J, Shibata DK, Gupta V, Huang S, Hu J: ***Automatic white matter, ventricle, and stroke volumetric analysis of brain MRI multimodal scans useful for epidemiologic studies and in identifying individual risk for future stroke and dementia***. 94 Radiological Society of North America Scientific Assembly and Annual Meeting, Chicago, USA, November 30 – December 5, 2008.
47. Nowinski WL, Qian GY, **Bhanu Prakash KN**, Volkau I, Gupta V, Puspitasari F, Hu J, Liu J, Huang S, Kaźmierski R, Ambrosius W, Urbanik A, Chrzan R, Beauchamp NJ: ***Computer-aided, atlas-assisted processing and quantification of CT and MR scans in stroke***. Neuroradiology, European Society of Neuroradiology, ESNR 2008.
48. Nowinski WL, Qian G, **Bhanu Prakash KN**, Volkau I, Leong WK: ***CAD systems for ischemic and hemorrhagic strokes.*** Proc. Medical Imaging and Informatics MIMI2007, Beijing, China, August 14–16 2007: 320-330.
49. S Suresh MD, Guo Liang, Karen, **Bhanu Prakash KN**, Dr Indrani S, Nowinski WL*: **Atlas of fetal CNS anomalies from multi-dimensional Ultrasound***. 92 Radiological Society of North America Scientific Assembly and Annual Meeting Program 2006, Chicago, USA, 25 November – 1 December 2006:904.

50. Nowinski WL, Qian G, **Bhanu Prakash KN**, Volkau I, Bilello M, Beauchamp NJ: ***A CAD system for stroke MR and CT.*** 92 Radiological Society of North America Scientific Assembly and Annual Meeting Program 2006, Chicago, USA, 25 November – 1 December 2006:789.

51. Ng TT, Volkau I, **Bhanu Prakash KN**, Nowinski WL: ***On statistical correlation between the cortical and subcortical structures.*** Proc. 1st Singaporean-French Biomedical Imaging Workshop, 12-13 October 2006 B7: 26-27.

52. Nowinski WL, Qian GY, **Bhanu Prakash KN**, Volkau I, Hu Q, Thirunavuukarasuu A, Nick Ivanov, A.S. Parimal, Qiao Y, Ananthasubramaniam A, Huang S, Runge VM, and Beauchamp NJ: ***Computer-aided diagnosis design and development of a system for stroke MR image processing***. WSEAS Conference Cellular and Molecular Biology Biophysics And Bioengineering (BIO'06) Greece, 14 – 16 July 2006:20-25

53. Nowinski WL, Qian G, **Bhanu Prakash KN**, Volkau I, A Thirunavuukarasuu, Liu J, Ananthasubramaniam A, Qiao Y, Hu Q, Runge V, Beauchamp NJ: ***A CAD system for stroke MR***. Proc. American Society of Neuroradiology 44th Annual Meeting, ASNR 2006, San Diego, USA April 29 – May 5 2006: 425-426.

54. Nowinski WL, Qian GY, Hu Q, **KN Bhanuprakash**, Ivanov N, Huang S, AS Parimal, Liu J: ***Fast and automatic interpretation of normal morphological brain scans by using an atlas with non-linear warping.*** Program 91st Radiological Society of North America Scientific Assembly and Annual Meeting RSNA 2005, Chicago, Illinois, USA, 27 November - 2 December 2005:857.

55. Nowinski WL, Qian GY, **Bhanu Prakash KN**, Volkau I, A. Thirunavuukarasuu, Beauchamp NJ, Runge VW, Ananthasubramaniam A, Liu J, Qiao Y, Hu Q, Bilello: ***Atlas-assisted MR stroke image interpretation by using anatomical and blood supply territories atlases***. Program 91st Radiological Society of North America Scientific Assembly and Annual Meeting RSNA 2005, Chicago, Illinois, USA, 27 November - 2 December 2005:857.

56. Volkau I, Aziz A, **Bhanu Prakash KN**, Anand A, Teistler M, Nowinski WL: ***Visualization of brain asymmetries caused by abnormality.*** Program 91st Radiological Society of North America Scientific Assembly and Annual Meeting RSNA 2005, Chicago, Illinois, USA, 27 November - 2 December 2005:857.

57. Nowinski WL, Volkau I, **Bhanu Prakash KN**, Ananthasubramaniam A, Ivanov N, Beauchamp N: ***Automatic interpretation of stroke images by means of an anatomical atlas***. American Society of Neuroradiology, ASNR 43rd Annual Meeting Metro Toronto Convention Centre, Canada, May 23-27, 2005: 427.

58. Nowinski WL, Hu Q, **Bhanu Prakash KN**, Qian G, Thirunavuukarasuu A, Aziz A: ***Automatic interpretation of normal brain scans.*** The RSNA, 90th Scientific Assembly & Annual Meeting Program; Chicago, Illinois, USA, 28 Nov - 3 Dec 2004: 710.

59. Pham DM, **Bhanu Prakash KN**, Nowinski WL: ***Brain atlas-assisted segmentation of the hippocampus from MR neuroimages***. Proc. 1st International Bioengineering Conference, IBEC 2004; Singapore, 8-10 September 2004:97-100.

60. **K. N. Bhanu Prakash** and A. G. Ramakrishnan, ***"MR Image Enhancement by Nonlinear Techniques",*** NCC– 2002, Jan 24-26, 2002, Mumbai, India.

61. **K. N. Bhanu Prakash** and A. G. Ramakrishnan, ***"Ultrasound texture based assessment of fetal pulmonary maturity***", Biovision – 2001, Dec 22-24, 2001 at Bangalore, India.

62. **K. N. Bhanu Prakash**, A. G. Ramakrishnan, S.Suresh and Teresa P Chow, ***" Fetal Lung Maturity Analysis using Sonogram Textural Features ",*** Proc. Symposium on BME and Nuclear Medicine, Mumbai, India, Jan 2000, pp., 155-161.

63. **K. N. Bhanu Prakash**, A. G. Ramakrishnan, and S. Suresh, ***"Can Sonogram Predict Fetal Lung Maturity",*** Proc. XVIII Southern Biomedical Engg. Conf., Clemson, SC, May 21 – 23, 1999.
64. **K. N. Bhanu Prakash**, Uma S Ranjan and Madhukar Pandit, ***"Wavelet Based Systole Detection from Ultrasound Doppler"***, NCBME- 98, Manipal Institute of Technology, Manipal, Karnataka, India, April 1998.
65. **K. N. Bhanu Prakash**, A. G. Ramakrishnan et al., ***"Ultrasound Image Compression using Vector Quantization"***, BECON – 97, National Conference on Advances in Biomedical Engineering, MEC, Cochin, Kerala, India, September 1997.
66. M. S. Dinesh and **K. N. Bhanu Prakash** ***"Vision System for Bone Fracture Measurement from Digital Hand Radiograph",*** IEEE EMBS Conference, New Delhi, India, February 1995.
67. M. N. Ramesh, **K. N. Bhanu Prakash**, et al., "***Microprocessor based Retort Control System for optimum sterilization of Foods"***, TEPEM – 94, Chennai, India, December 1994.
68. **K. N. Bhanu Prakash**, Anupam Srivastav, Tiwari and Kiran Radhakrishna, "***Design and Implementation of Path Planning for Mobile Robot"***, International Symposium on Intelligent Robotics, Bangalore, India, January 1993.