CURRICULUM VITAE

September 28, 2018

NAME:	Khader M. Hasan, Ph.D.
PRESENT TITLE:	Professor of Diagnostic and Interventional Imaging
ADDRESS:	6431 Fannin St., MSE R168 Houston, Texas 77030
CITIZENSHIP:	U.S.A.
UNDERGRADUATE EDUCATION:	BSc, Physics, University of Birzeit, Palestine 1984-1989
GRADUATE EDUCATION:	MSC, Physics. Brigham Young University, Utah 1990-1993 PhD, Medical Physics, University of Utah, 1994-2000
POSTGRADUATE EDUCATION:	University of Wisconsin (Keck Brain Mapping Lab, Madison) 2001 - 2002
ACADEMIC APPOINTMENTS:	Assistant Professor of Radiology, University of Texas Health Science Center at Houston – Medical School, Diagnostic & Interventional Imaging, 2002 – 2008 Adjunct Assistant Professor of Bioengineering, University of Houston, 2005 – Present Assistant Scientist, University of Wisconsin in Madison, Keck Laboratory for functional brain imaging and behavior, 2002 – 2002 Graduate Research Assistant, University of Utah, 1998 – 2000 Graduate Teaching Assistant, University of Utah, 1996 – 1998 Graduate Teaching Assistant, Brigham Young University, 1991 - 1993
PROFESSIONAL APPOINTMENTS:	Local: Houston Society of Biomedical Engineering, 2005 – Present Regional: American Physics Society, 1993 – Present National: Society for Neuroscience, 2007 – Present International: International Society of Magnetic Resonance in Medicine, 1995 - Present
HONORS:	New and Advanced User of Matlab and IDL Trainer, University of Utah, 1999

Trainer of New Physics Graduate Teaching Assistants, University of Utah, 1998

Outstanding Teaching Assistant in Physics, University of Utah, 1996

Outstanding Teaching Assistant in Physics, University of Utah, 1995

PATENTS:

US Patent on Method and system for diffusion tensor imaging and application to the human brain across the lifespan. U.S. Provisional Patent Application No. 61/304,986, filed on Feb. 16, 2010 (Attorney Docket No. 2105-06800). http://www.freshpatents.com/-dt20110818ptan20110199084.php

EDITORIAL POSITIONS:

J of Neuroimaging, Editorial Board, https://onlinelibrary.wiley.com/page/journal/15526569/homepage/editorialboard.html, 2018 - current

REVIEWER:

Multiple Sclerosis, 2005 – Present

Magnetic Resonance in Medicine, 2005 – Present

NeuroImage, 2005 – Present

Magnetic Resonance Imaging, 2006 – Present

Journal of Magnetic Resonance, 2006 – Present

Neuroscience Letters, 2005 – Present

IEEE Transactions of Biomedical Engineering, 2003 – Present

Journal of Neuroscience Methods, J Magnetic Resonance Imaging, 2007 – Present

Movement Disorders, 2007 – Present

International Journal of Developmental Neuroscience, 2008 – Present

Neurobiology of Aging, 2008 – Present

Journal of Neuroimaging, Neuroradiology, Cortex, Neuroradiology, Brain Research, Brain Research Reviews, 2009 – Present

Medical Physics, Cortex, Cerebral Cortex, Human Brain Mapping,

2010 – Present

Journal of Neuroscience, Stroke, 2015 - Present

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES (Adhoc):

Brain Disorders and Clinical Neuroscience Study Section (NIH), 2007 – Present

Acute Neural Injury and Epilepsy (ANIE) Study Section (NIH), 2008 – Present

Neurotechonology (NT) Study Section Emerging Technologies and Training in Neurosciences (ETTN), 2010 – Present

Imaging Core Reviewer for Consortia Grants by National Institute of Alcoholism and Alcohol Abuse Longitudinal Studies on the Impact of Adolescent Drinking on the Adolescent Brain, 2012 – Present

Clinical and Translational Imaging Applications (*adhoc* mail Reviewer), 2016 - Present

SERVICE ON MCGOVERN MEDICAL SCHOOL AT THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON COMMITTEES:

University of Texas Medical School New Student Interviewer, 2004 – Present

Faculty Senate, 2005 – 2011

Body MRI Fellowship Interviewer, 2003 - 2007

SERVICE ON GRADUATE SCHOOL COMMITTEES:

GSBS Faculty Member, 2005 – Present

SERVICE TO THE COMMUNITY:

Invited Lecture organized by the Local Chapter of National Multiple Sclerosis "Research Advances in Multiple Sclerosis". Sept. 2006

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:

Bhavik Kanabar **2003 – 2005**, Finished Masters degree in DTI

Aparna Deo **2004 – 2006**, Quantitative methods for monitoring Rat Spinal Cord Injury and Therapy

Vijay Ramu **2004 – 2005**, Combined fMRI and DTI of Rat Brain

Venkata Kishore Mogatadakala **2005 – 2006**, GSBS student working on dissertation

Christopher Halphen **2006 – 2007**, Trained to prepare for medical school

Nikhil Nayak **2006 – 2006**, Summer Student

Eric Garcia of Houston **2006 – 2006**, Trained to prepare for graduate project at University

Russ Jenkins **2008 – 2010**, PhD, UofH (awarded)

Jenny Kluth **2007 – 2010**, MSc UofH (awarded)

Amery Treble **2008 – 2010**, PhD, MD GSBS

Chirag Patel **2008 – 2010**, PhD, MD, GSBS (awarded)

Rene Colorado **2007 – 2010**, PhD, MD, GSBS (awarded)

Vaibhav Juneja **2008 – 2013**, PhD, GSBS

Tony Passaro **2008 – Current**, MSc, UofH (awarded)

SPONSORSHIP OF POSTDOCTORAL FELLOWS:

Thomas Eluvathingal-Jose, MD **2006 – 2007**, Trained to join Residency

Arash Kamali, MD **2007 – 2009**, Currently Neuroradiologist

Amal Iftikhar, MD **2008 – 2009,** Trained to join Residency

Humaira Abid, MD **2008 – 2009**, Trained to join Residency

Lian Xue, PhD **2008 – 2010**, Postdoctoral Fellow

Zafer Keser, MD **2013 – 2017**, Neurology Residency

CURRENT GRANT SUPPORT:

Image Analysis Center (PI: Narayana/Savitz) 11/9/15 – 11/8/18 calendar
Sunovion/SanBio, Inc.
Major Goals: Provide MRI analysis on the Stroke patients treated with stem cells as a part of phase 2 clinical trials.
Role: Investigator

PAST GRANT SUPPORT:

Image Analysis Center (PI: Narayana/Savitz) 9/1/15 – 9/1/18 calendar
SanBio, Inc.
Major Goals: Provide MRI analysis on the traumatic brain injured patients treated with stem cells as a part of phase 2 clinical trials.
Role: Investigator

Dunn Foundation (PI: Soares) 9/1/14 – 8/31/17 1.8 calendar
Dunn-Genomics of Bipolar Disorder Research Fund
Major Goals: Research on the genomics of bipolar disorder.

TIRR Foundation (PI: Yozbatiran) 11/1/15 – 9/15/16 calendar
Sunovion/SanBio, Inc.
Major Goals: Effects of Combined Cerebral and Spinal Direct Current Stimulation on Upper Limb Recovery in incomplete Spinal Cord Injury.

DTI Data Consultant (PI: Schulz) 3/16/16 – 2/28/17 calendar
Major Goals: Analyzing 3T MRI's w/DTI images for
Role: Investigator

1 R01 NS078244-01A1 (PI: Narayana) 9/1/12 – 5/31/17 .84 calendar
NIH/NINDS Annual DC $218,750
Lesion Activity and Atrophy in Multiple Sclerosis: Analysis of Multi-center MRI
Major Goals: The analysis of longitudinal MRI data on a multi-center cohort

P50 DA009262 (Schmitz, Core PI) 7/1/10 - 6/30/15 1.8 calendar
NIDA/NIH Annual DC $121,000
Psychopharmacology of Novel Medications for Cocaine Dependence
(component for P50 DA009262- Project 2, Lane PI)
Major Goals: To use laboratory measures of behavioral and subjective effects to evaluate the potential utility of medications for the treatment cocaine dependence.

5K23NS072134-04 (PI: Nelson) 1/15/11 – 3/14/15 6 calendar
NIH/NINDS Annual DC $48,750
Detection of MS Related Cognitive Impairment: In Search of MRI Surrogate Markers
Major Goals: Detection of Multiple Sclerosis surrogate markers

TIRR Foundation 014-107 Francisco (PI) 3/1/15 – 2/28/16
Effects of combined transcranial direct current stimulation and robot-assisted arm training after traumatic brain injury
Major Goals:
Role: Investigator

Dunn Foundation Soares (PI) 9/01/14 – 8/31/15
Dunn-Genomics of Bipolar Disorder Research Fund
Major Goals: Research on the genomics of bipolar disorder.

5P50DA009262-20 Lane (PI) 12/1/14 – 5/31/15
National Institute on Drug Abuse
Substance Abuse Research-Medications Development Center PROJECT 2
Major Goals:
Role: Investigaor

Single-Dose Study-Intravenous Savitz (PI) 12/16/14 – 2/28/15
Major Goals: A Randomized, Double-Blind, Placebo-Controlled, Ascending Single-Dose Study of Intravenous
Role: Consultant

NASA Shared Services Center Riascos-Casteneda (PI) 12/1/14 – 2/28/15
Association of DTI Parameters of Optic Tracts & Cerebral White Matter Tracts
Major Goals: Visual Impairment & Structural Changes of the Eyes & Optic Nerves in Long-Duration Microgravity Exposure
Role: Investigator

NNX13AH23G/13-073 (Hasan, K) 4/1/13 – 3/30/14 (on No Cost Extension)
UTMB Sub w/NASA Total Award: $32,999
NRA: Research and Technology Development to Support Crew Health and Performance in Space Exploration Missions

PT074693P10 (Narayana, PA) 8/1/08- 7/31/13
Mission Connect Mild TBI Translational Research Consortium
US Department of Defense Direct Costs: $181,882

5P50HD052117-05 (Papanicolaou, AC) 9/1/11 – 11/30/11
Texas Center for Learning Disabilities – Project 4
Ctr for Research for Mothers and Children Direct Costs: $285,870

1RO1-NS 052502-01A1 (Hasan, KM) 7/1/06 – 7/1/11
Diffusion Tensor Imaging of Wallerian Degeneration in Multiple Sclerosis
National Institute of Health (NIH)

1RO1-NS046308-01 (Ewing-Cobbs, L) 5/1/04 – 4/30/09
Academic Outcomes After Pediatric Traumatic Brain Injury
National Institute of Health (NIH)

P01 HD35946 (Fletcher, JM) 3/1/98 – 2/28/10
Spina Bifida: Cognitive and Neurobiological Variability
NICHD, National Institute of Health (NIH)

P50 HD052117 (Papanicolaou, AC) 9/15/02 – 9/14/07
Design quantitative MRI acquisition and processing methods for Reading disabilities in Children
National Institute of Health (NIH)

2 R01 NS 30821 (Narayana, PA) 4/1/02 – 3/31/07
Magnetic Resonance of Spinal Cord Injury
National Institute of Health (NIH)

1 S10 RR019186-01 (Narayana, PA) 4/1/04 – 3/31/05
National Institute of Health (NIH)/National Science Foundation
3T Whole body Magnetic Resonance Scanner

P50 DA09262 (Moeller, GF) 4/1/05 – 3/31/06
Impulsivity, Brain Function and Substance Abuse Treatment
National Institute of Health (NIH)

PUBLICATIONS:

A. ABSTRACTS:

1. Alexander, A.L., Burr, R., Hasan, K.M., Jones, G., Chong, B., and Tsuruda, J.A.: Technique for Functional Localization of the Sensory Motor Cortex with Diffusion Anisotropy. Proc. of the 7th ISMRM Philadelphia. p326, 1999
2. Fukuzaki M, Alexander A.L., Goodrich, C., Hasan, K.M., Buswell, H.R., Gullberg, G.T., and Parker, D.L.: The Ability of Line Scan Diffusion Imaging Method" Proc. of the 7th ISMRM Philadelphia. p1833, 1999
3. Lazar, M., Weinstein, D., Hasan, K.M., and Alexander, A.L.: Axon Tractography with Tensorlines. Proc. of the 8th ISMRM, Denver. p482, 2000
4. Alexander, A.L., Hasan, K.M., Lazar, M., Tsuruda, J., and Parker, D.L.: Analysis of Partial Volume Effects in Diffusion-Tensor MRI. Proc. of the 8th ISMRM, Denver. p781, 2000
5. Alexander, A.L., Hasan, K.M., Kindlman, G., Parker, D.L., and Tsuruda, J.A.: Geometric Analysis of Diffusion Tensor Measurements of the Human Brain. Proc. of the 8th ISMRM, Denver. p86, 2000
6. Hasan, K.M., Parker, D.L., and Alexander, A.L.: Bootstrap Analysis of DT-MRI Encoding Techniques Proc. of the 8th ISMRM, Denver. p789, 2000
7. Hasan, K.M., Parker, D.L., Roberts, J., and Alexander, A.L.: Comparison of Optimization Procedures for Diffusion-Tensor Encoding Directions. Proc. of the 8th ISMRM, Denver. p792, 2000
8. Lazar, M., Hasan, K.M., and Alexander, A.L.: Bootstrap Analysis of DT-MRI Tractography Techniques: Streamlines and Tensorlines. Proc. of the 9th ISMRM, Glasgow. p1527, 2001
9. Sato T, Hasan, K.M., and Alexander, A.L.: An Algorithm for White Matter Connectivity in the Human Brain Using Projected Diffusion Tensor Distance. Proc. of the 9th ISMRM, Glasgow. p1520, 2001
10. Wilbur, B.S., Hasan, K.M., Alexander, A.L., and Parker, D.L.: Optimal Sampling for 3D Projection Reconstruction Imaging. Proc. of the 9th ISMRM, Glasgow p682, 2001
11. Field, A.S., Alexander, A.L., Hasan, K.M., Arfakanis, K., Witwer, B.P., Moftakhar, R., Deshmukh, P., Haughton, V., Rowley, H., Noyes, J., Hermann, B., Meyerand, M.E., Badie, B.: Diffusion-Tensor MR Imaging Patterns in White Matter Fiber Tracts Altered By Neoplasm. ISMRM DTI Workshop, Saint-Malo, France. p 137, 2002
12. Hasan, K.M., and Alexander, A.L.: Diffusion Tensor Encoding Strategies: Optimization and Considerations. ISMRM DTI Workshop, Saint-Malo, France. pp 210-213, 2002
13. Witwer, B.P., Moftakhar, R., Hasan, K.M., Deshmukh, P., Haughton, V., Field, A., Arfanakis, K., Noyes, J., Moritz, C.H., Meyerand, M.E., Rowley, H., Alexander, A.L., Badie, B.: Diffusion tensor localization of white matter tracts in brain tumor patients. 5th Biennial Satellite Symposium of the AANS/CNS Section on Tumors, Chicago, IL, 2002
14. Alexander, A.L., Hasan, K.M., Arfakanis, K., Witwer, B.P., Field, A.S., Moftakhar, R., Seshmuk, P., Haughton, V., Rowley, H., Noyes, J., Hermann, B., Meyrend, M.E., and Badie B.: Assessment of Tumor/White Matter Interaction with Diffusion Tensor MRI" Proc. of the 10th ISMRM, Honolulu, USA. p2077, 2002
15. Hasan, K.M., Arfanakis, K., and Alexander, A.L.: A Referenceless, Balanced and Efficient Encoding Scheme for Diffusion Tensor Imaging. Proc. of the 10th ISMRM, Honolulu. p1107, 2002
16. Hasan, K.M., and Narayana, P.A.: Diffusion Tensor Imaging of the Human Brain: A Potential Technique for Mapping White Matter Fibers. 9th Annual UTHSC Research Day, Houston, TX. Nov, 2002

17. Hasan, K.M., and Narayana, P.A.: A Novel Multi-Faceted Icosahedral Diffusion Tensor Encoding Scheme for Mapping the Full Human Brain in 10 Minutes. World Congress on Medical Physics and Biomedical Engineering. p1060, (Talk), 2003
18. Hasan, K.M., and Narayana, P.A.: Computation of the ADC, Relative and Fractional Anisotropy maps in DT-MRI without a Diffusion Tensor Model. Proc. of the 11th ISMRM, Toronto. p2142, 2003
19. Kanabar, B.P., Santos, R.M., Narayana, P.A., and Hasan, K.M.: Diffusion Tensor MRI Analysis Tools for Visualization and Quantification of Brain Tissue Microstructure. Tenth Annual Neuroscience Poster Session. University of Texas at Houston December 6, 2003
20. Moeller, F.G., Dougherty, D.M., Hasan, K.M., Swann, A.C, Narayana, P.A., Renshaw, P.F., Kramer, L.A., and Barratt, E.S.: Brain Neurobiology Related to Impulsivity: Risk Factor or Consequence of Cocaine Dependence? International Journal of Neuropsychopharmacology Supp (Poster Presentation at the XXIV CINP Congress, Paris, France). Vol. 7 pg. S310, 2004
21. Ewing-Cobbs, L., Hasan, K.M., Kramer, L., Prasad, M., and Narayana, P.A.: Diffusion Tensor MRI after Pediatric Brain Injury: Relation to Cognitive Outcome 32nd Annual meeting of the International Neuropsychological Society, Baltimore, MD. Feb 5, 2004
22. Hasan, K.M., and Narayana, P.A.: A novel Multi-faceted Icosahderal Diffusion Tensor Encoding Scheme for mapping the full Human Brain in Ten Minutes. Tenth Annual Neuroscience Poster Session. University of Texas at Houston Dec 6, 2003
23. Steinberg, J.L., Frederick, Moeller G.F., Narayana, P.A., Dougherty, D.M., Hasan K.M., Kramer, L.A., and Renshaw P.F.: Functional MRI of MDMA Users and Control Subjects During Delayed Memory Task 12th International Society of Magnetic Resonance in Medicine Meeting in Kyoto, Japan. p1162, 2004
24. Field, A.S., Wu, Y.J., Alexander, A.L., Wu, Y.C., Hasan, K.M., and Duncan, I.D.: Axial and Radial Components of the Diffusion Tensor in the Myelin Mutant Shaking Pup. 12th International Society of Magnetic Resonance in Medicine Meeting in Kyoto, Japan. p722, 2004
25. Kramer, L.A., Hasan, K.M., and Vu, T.T.: Dynamic Contrast MR of Hepatic Hemangiomas: Evaluation of Temporal Signal Intensity Changes. Proc. 12th International Society of Magnetic Resonance in Medicine Meeting in Kyoto, Japan, p2617, 2004
26. Hahn, K.R., Prigarin, S., and Hasan, K.M.: A Novel Denoising Technique for very noisy diffusion tensor MRI data. Proc. 12th International Society of Magnetic Resonance in Medicine Meeting in Kyoto, Japan. p1208, 2004.
27. Hasan, K.M., Kanabar, B.P., Santos RM, Wolinsky JS, Narayana PA. Diffusion Tensor MRI Regional Fractional Anisotropy as a surrogate to detect Axonal Damage in Multiple Sclerosis. Proc.12th International Society of Magnetic Resonance in Medicine Meeting May in Kyoto, Japan. p1498, 2004
28. Hasan, K.M., Kanabar, B.P., Santos R.M., Kramer, L.A., Prasad M., Narayana, P.A., and Ewing-Cobbs, L.: Diffusion Tensor MRI after Pediatric Brain Injury. Proc. 12th International Society of Magnetic Resonance in Medicine Meeting in Kyoto, Japan. p1350, 2004
29. Hasan, K.M., Kanabar, B.P., Santos, R.M., Ewing-Cobbs, L., and Narayana, P.A: Age Dependence of the Fractional Anisotropy of Genu and Splenium of Human Corpus Callosum Using Optimized DT-MRI. Proc. 12th International Society of Magnetic Resonance (ISMRM) in Kyoto, Japan. p338, (Talk), 2004
30. Steinberg, J.L., Moeller, F.G., Hasan, K.M., Narayana, P.A., Dougherty, D.M., Kramer, L.A., Renshaw, P.F.: Functional magnetic resonance imaging and diffusion tensor imaging in cocaine dependence. Presentation at World Psychiatric Association International Congress. Treatments in Psychiatry: an Update, Florence, Italy. November 10-13, 2004

31. Moeller, F.G., Steinberg, J.L., Dougherty, D.M., Hasan, K.M., Swann, A.C., Narayana P, Renshaw, P.F., Kramer, L.A., and Barratt, E.S.: Brain neurobiology related to impulsivity: Risk factor or consequence of cocaine dependence? International Journal of Neuropharmapsychology 7: S310-S310 Suppl. 1, June 2004
32. Moeller, F.G., Hasan, K.M., Steinberg, J.L., Narayana, P.A., D.M., Dougherty, D.M., Kramer, L.A., Santos R.M., Swann, A.C., and Barratt E.S.: Corpus Callosum White Matter Integrity as Measured by Diffusion Tensor Imaging is Related to Impulsivity in Cocaine-Dependent Subjects. P 464.1. Society of Neuroscience, 2004
33. Hasan, K.M., Patel, V.K., Ewing-Cobbs L., Moeller, G.F., Steinberg, J.L., Wolinsky, J.W., Narayana, P.A: Mapping the entire human brain in 5 minutes using optimized diffusion tensor imaging: Toward building in vivo a digital fiber atlas of the developing, normal and pathological brain. Tenth Annual Neuroscience Poster Session. University of Texas at Houston Nov 19. p116, 2004
34. Sundberg, L.M., Grill, R.J., Deo, A., Hasan, K.M., Narayana, P.A.: DTI - Histology Correlation in Spinal Cord. Presented at the University of Texas Medical School Graduate School Competition, 2005
35. Hou, P., Hasan, K.M., Sitton, C.W., Wolinsky, J.S., and Narayana, P.A.: Quantitative Analysis of Contrast Efficiency of Phase Sensitive T1IR and Its Primary Applications to Neuroimaging. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida. p2811, 2005
36. Sundberg, L.M., Grill, R.J., Deo, A., Hasan, K.M., Narayana P.A.: DTI - Histology Correlation in Spinal Cord. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida. p2375, 2005
37. Deo, A., Hasan, K.M., Narayana, P.A.: Effect of NT3 on Fiber Tract Integrity in Experimental Spinal Cord Injury. Neurotrauma Conference, 2005
38. Moeller, F., Hasan, K.M., Steinberg, J.L., Kramer, L.A., Narayana, P.A. DTI: Relationship to Behavior in Cocaine Dependence. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida, p1383, 2005
39. Kanabar, B.P., Hasan, K.M., Sajja, B.R., Narayana, P.A.: A Diffusion Tensor Imaging based semi-automated segmentation and subdivision of the human corpus callosum: correlation of anisotropy and callosal area and application to gender based differences. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida p1347, 2005
40. Hahn, K.R., Prigarin, S., Hasan, K.M.: The Feasibility of Diffusion Tensor Imaging for the Human Brain at 1 mm3 Resolution. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida, p161 (Talk), 2005
41. Gupta R.K., Hasan, K.M., Mishra, A.M., Jha, D., Husain, M., Prasad, K.N., and Narayana P.A.: Does Increased Fractional Anisotropy in Brain Abscess Imply White Matter Tracts on DTI? Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida, p1351, 2005
42. Gupta, R.K., Saksena, S., Hasan, K.M., Husain, M., Trivedi, R., Agarwal, A., and Narayana, P.A.: Diffusion Tensor Imaging of Post-traumatic Epilepsy. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida, p1379, 2005
43. Gupta, R.K., Hasan, K.M., Trivedi, R., Kanabar, B.P., Pradhan, M., Das, V., Parikh, N.A., Narayana, P.A.: Diffusion Tensor Imaging of Developing Human Cerebrum. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida. p292, 2005
44. Hasan, K.M., Ewing-Cobbs L., and Narayana P.A.: Comparison and Modeling of Entire Brain Same Subject DTI Results at 1.5 T and 3.0 T using Icosahedral Schemes: Application

to Normal, Multiple Sclerosis and Pediatric Post Traumatic Brain Injury. Presented at the ISMRM workshop on Methods for Quantitative Diffusion MRI of Human Brain. Alberta (Canada 13-16 March). p12, 2005.

45. Hasan, K.M., Sajja, B.R., Gupta, R.K., Wolinsky, J.S., and Narayana, P.A.: Diffusion Tensor Fractional Anisotropy and Compact Fiber Tracking of the Normal-Appearing Seven Segments of the Corpus Callosum in Healthy Adults and Relapsing-Remitting Multiple Sclerosis Patients. Proceedings of the 13th International Society of Magnetic Resonance in Medicine. Miami, Florida. p652, (Talk), 2005
46. Ashtari, M., Hasan, K.M., Kester, H., Ardekani, B., Cervellione, K., Wu, J., McIIree, P.R., Szesko, and Kumra, S.: White Matter Development during Late Adolescence in Healthy Males: A cross-Sectional Diffusion Tensor Imaging Study. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington, USA. p770, 2006
47. Trivedi, R., Gupta, R.K., Agarwal, A., Hasan, K.M., Gupta,A., Prasad, K.N., Narayana, P.A.: Assessment of White Matter Damage in Subacute Sclerosing Panencephalitis using Quantitative Diffusion Tensor MRI International Society of Magnetic Resonance in Medicine 14 th Meeting in Seatle, Washington. p136, 2006
48. Trivedi, R., Gupta, A., Malik, G.K., Gupta, R.K., Hasan, K.M., Prasad, K.N., Narayana, P.A.: Quantitative DTI Assessment of Periventricular White Matter changes in Neonatal Meningitis. International Society of Magnetic Resonance in Medicine 14th Meeting in Seatle, Washington. p2067, 2006
49. Trivedi, R., Malik, G.K., Gupta, R.K., Hasan, K.M., Hasan, M., Gupta, A., Pandey, C.M., and Narayana, P.A.: Serial Quantitative Diffusion Tensor MRI of the Term Neonates with Hypoxic-ischemic Encephalopathy (HIE). International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington, USA. p3412, 2006
50. Mishra, A.M., Gupta, R.K., Nath, K., Prasad, A., Hasan, K.M., Prasad, K.N., Husain, M., Husain, N., Kumar, S., and Narayana P.A.: Diffusion Tensor Fractional Anisotropy is a Potential Surrogate Marker for Neuroinflammatory Molecules in Brain Abscess. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington, USA. p132, 2006
51. Haris, M., Gupta, R.K., Husain, N., Hasan, K.M., Pal, L., and Narayana PA. Measurement of DTI metrics in Hemorrhagic Brain Lesions: Its possible implication in imaging interpretation. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p3435, 2006
52. Saksena, S., Gupta, R.K., Hasan, K.M., Agarwal, A., Haris, M., Pandey, C.M., and Narayana, P.A.: Focal Wallerian Degeneration of Corpus Callosum in Large Middle Cerebral Artery Stroke: Serial Diffusion Tensor Imaging. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p273, 2006
53. Mogatadakala, K.V., Datta S., Poonawalla, A., Hasan, K.M., Wolinsky, J.S., and Narayana, P.A.: Identification of Abnormal White Matter in Multiple Sclerosis. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p2109, 2006
54. Kramer, L.A., Hasan, K.M., Sankar, A., Prasad, M.R., Bachevalier, J., Fletcher, J.M., and Ewing-Cobbs, L.: Anisotropy and Diffusivity in Corpus Callosal Subregions after Pediatric TBI. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p3404, 2006.
55. Deo, A.A., Grill, R.J., Hasan, K.M., Narayana, P.A.: In vivo Longitudinal Diffusion Tensor Imaging of Spinal Cord Injury in Rats International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p882, 2006 (Talk given on Behalf of Deo, A.)

56. Deo, A.A., Grill, R., Hasan, K.M., Narayana, P.A.: In vivo Regional Diffustion Tensor Metrics of Rodent Spinal Cord. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington (USA, May 6-12). p990, 2006.
57. Halphen, C., Hasan, K.M., and Narayana, P.A.: Diffusion Tensor Imaging, T2 Relaxation and Volumetry of the Aging Human Caudate Nuclei. Presented at the 13th University of Texas Neuroscience Research Conference Dec, 2006.
58. Hasan, K.M., Ahn, C., Gupta, R.K., Kramer, L., Ewing-Cobbs, L., Fletcher, J.M., and Narayana, P.A.: Diffusion Tensor Axial Diffusivity Differences in the Body of the corpus callosum of Age-Matched Male and Female Adults. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington, USA. p775 (Talk). 2006
59. Hasan, K.M., Sankar, A., Kramer, L., Prasad, M., Ewing-Cobbs, L: Arcuate Fasciculus Maturation is Impaired in Pediatric Traumatic Brain Injury: A DTI Study at 3.0 T. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington, USA. p134, (Talk), 2006
60. Hasan K.M., Sankar, A., Kramer, L., Ewing-Cobbs, L., Brandt, M., Hannay, J., Blaser, S., Dennis, M., and Fletcher, J.M.: Diffusion Tensor Imaging of the Spina Bifida Menigomyelocele at 3.0T: Preliminary evidence of Neurodevelopmental Brain plasticity. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p276, (Talk), 2006
61. Hasan, K.M., Rodenacker, K., and Hahn K.R.: Evaluation of SNR Performance and Utility of High Spatial and Angular Resolution Denoised 1mm3 Isotropic DTI of Entire Human Brain at 3.0T. International Society of Magnetic Resonance in Medicine 14th Meeting in Seattle, Washington. p344, (Talk), 2006
62. Trivedi, R., Gupta, R.K., Shah, V., Hasan, K.M., Tripathi, M., and Narayana, P.A.: Assessment of White Matter Damage in Cerebral Palsy Using Quantitative Diffusion Tensor Imaging. Proceeding of International Society of Magnetic Resonance in Medicine (ISMRM). Berlin, Germany. p3780, 2007
63. Kumar, R., Gupta, R.K., Margaret, M., Husain, M., Hasan, K.M., Agarwal, A.K., and Narayana, P.A: Diffuse Axonal Injury in Corpus Callosum and Internal Capsule in Moderate to Severe Traumatic Brain Injury. Proceeding of International Society of Magnetic Resonance in Medicine (ISMRM). Berlin, Germany. p3532, 2007
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67. Hasan K.M., Fletcher J.M., Ewing-Cobbs, L., Ambika Sankar, A., Eluvathingal, T.J., Kramer, L.A., Ashtari, M., Juranek, J., Sarkari, S., and Papanicolaou, A.C.: A Multi-Scale Whole-Brain Optimized Diffusion Tensor Imaging of Dyslexics at 3.0T. Proceeding of International Society of Magnetic Resonance in Medicine (ISMRM). Berlin, Germany. p3749, 2007.

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70. Kramer, L.A., Stanton, D.L., Krampert, S.D., and Hasan, K.M.: Comparison of Left and Right Ventricle Functional Measurements Using Steady State Free Precession-Short Axis Versus Four Chamber Analysis. Proceeding of International Society of Magnetic Resonance in Medicine (ISMRM). Berlin, Germany. p3858, 2007
71. Kramer L.A, Matta E.J., Rao A.T., Pai D.K., Hasan K.M.: The Value of CINE Bright Blood Sequences in the Evaluation of Cryptogenic Stroke. ISMRM 16th scientific meeting and exhibition, Toronto, Ontario, Canada, May 3-9, 2008
72. Dennis, M., Hopyan-Misakyan, T., Juranek, J., Cirino, P, Hasan, K.M., and Fletcher, J.M.: Strong and Weak Metric Rhythm Identification in Spina Bifida Meningomyelocele in Relation to Parcellated Anterior and Posterior Cerebellar Volumes. Neuroscience & Music III: Disorders & Plasticity.Montreal, Canda, June 25-28, 2008
73. Ewing-Cobbs, L., M Prasad, Raches, D., Swank, P., Barnes, M., Kramer, L.A., Fletcher, J.M., Hannay, J.H., Hasan, K.M.: Relation of Diffusion Tensor Imaging Metrics from the Corpus Callosum with Neuropsychological Outcomes after Pediatric TBI. 36 Annual International Neuropsychological Society Meeting. Waikoloa, Hawaii, USA, February 6-9, 2008.
74. Kamali, A., Juranek, J., and Hasan, K.M.: Mapping the Human brain fiber pathways using diffusion tensor imaging at high angular and spatial resolution. Neuroscience Research Center 14th Annual Poster Session #32, Dec, 2007
75. Hasan, K.M., Halphen, C., Kamali, A., Wolinsky, J.S., and Narayana, P.A.: A Diffusion Tensor Imaging Surrogate Marker of Brain Atrophy in Multiple Sclerosis. Proceedings of the 16th ISMRM Meeting and Exibition, Toronto, Canada; p 708 May 3-9, 2008
76. Hasan, K.M., Halphen, C., Kamali, A., Wolinsky, J.S., and Narayana, P.A.: Caudate Nuclei Degeneration in Multiple Sclerosis: A Multi-Modal Quantitative MRI Approach. Proceedings of the 16th ISMRM Meeting and Exhibition. Toronto, Canada. p1615, May 3-9, 2008
77. Hasan, K.M., Kamali, A., Juranek, J.: Mapping the Human Brain Fiber Tracts Relative to Deep and Cortical Gray Matter Using Diffusion Tensor Imaging at High Angular and Spatial Resolution. The Houston Society for Engineering in Medicine and Biology (HSEMB 08 Conference), Houston, (Invited Talk). Feb 7, 2008
78. Kamali, A., Kramer, L.A., andHasan, K.M.: Anatomical Parcellation of the Cortical-brainstem Cerebellar White Matter Connections of the Human Brain: A Diffusion Tensor Tractography-based Study at 3.0 T and High Spatial Resolution 1mm x 1mm x 1 mm RSNA 94th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. Educational Exhibit (# 6010781), November 30 - December 5, 2008
79. Kramer L.A, Kramer, L.A., Kumar, S., Narotum, C., Loghin, E., Matta J., Rao, A. T. and Hasan K.M.: Low Dose Gadobenate Dimeglumine in Delayed Enhancement Cardiac MRI. Proceedings of the International society for Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition Honolulu, Hawai'i, USA #224, 18 - 24 April, 2009
80. Kamali, A., Kramer, L.A., andHasan, K.M.: Feasibility of Prefronto-Caudate Pathway Tractography Using High-Resolution Diffusion Tensor Tractography Data at 3 T. The 47th

Annual ASNR Meeting, in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada, May 18 - 21, 2009.

81. Kamali, A., Kramer, L.A., and Hasan, K.M.: High Spatial Resolution Diffusion Tensor Tractography of the Human Brain Cortico-Ponto-Cerebellar Pathways. The 47th Annual ASNR Meeting in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada. Vancouver Convention and Exhibition Centre - Control #: 832 - Exhibition Hall C - eSE #: eSE 50 (Shared Display), May 18 - 21, 2009.
82. Kamali, A., Kramer, L.A., and Hasan, K.M.: High-Resolution Atlas of Human Brain White Matter Pathways: A Diffusion Tensor Tractography Study on 3.0 T. The 47th Annual ASNR Meeting, in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada. Vancouver Convention and Exhibition Centre - Control #: 843 - Exhibition Hall C - eSE #: eSE 51 (Shared Display), May 18 - 21, 2009.
83. Kamali, A., Kramer, L.A., and Hasan, K.M.: Feasibility of Visual Pathways Tractography Using High-Resolution Diffusion Tensor Tractography Data on 3 T. Accepted for The 47th Annual ASNR Meeting, in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada. Vancouver Convention and Exhibition Centre - Control #: 958 - Exhibition Hall C - eSE #: eSE 26, May 18 - 21, 2009.
84. Xue, L., Ma, L., and Hasan, K.M.: A voxel-based analysis of SNR effect on diffusion tensor imaging. Proceedings of the International society for Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition Honolulu, Hawai'i, USA #4172. 18 - 24 April, 2009.
85. Kamali, A., Kramer, L.A., Butler, I.J., and Hasan, K.M.: Diffusion Tensor Tractography of the Somatosensory System in the Human Brainstem: Initial findings using high isotropic spatial resolution at 3.0 T. Proceedings of the International society for Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition 18 -. Honolulu, Hawai'i, USA #4337, 24 April, 2009
86. Kamali, A., Kramer, L.A., and Hasan, K.M.: Feasibility of prefronto-caudate pathway tractography using high resolution diffusion tensor tractography data at 3 T. Proceedings of the International society for Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition. Honolulu, Hawai'i, USA, #4084. 18 - 24 April, 2009
87. Hasan, K.M., Kamali, A., Iftikhar, A., Datta, S., Nelson, F., Wolinsky, J.S., and Narayana, P.A. Diffusion Tensor Tractogrpahy Quantification of Wallerian Degeneration of the Uncinate Fasciculus in Multiple Sclerosis. Proceedings of the International society for Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition. Honolulu, Hawai'i, USA #4363, 18 - 24 April, 2009
88. Hasan, K.M., Iftikhar, A., Kamali, A., Kramer, L.A., Cirino, P.T., Papanicolaou A.C., Fletcher J.M., Ewing-Cobbs, L.: Quantification of the Healthy Human Uncinate Fasciculus across the Lifespan using Diffusion Tensor Tractography. Proceedings of the International society for Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition. Honolulu, Hawai'i, USA, #5843 (Talk), 18 - 24 April, 2009
89. Hasan, K.M.: Diffusion tensor imaging of the developing and aging healthy human brain Macro and microstructural tissue organization across the lifespan. Houston Society of Biomedical Engineering 2009 meeting invited (Invited Talk). March 18-19, 2009

90. Hasan, K.M.: Diffusion tensor imaging of the naturally developing and aging human brain across the lifespan. UT Biomedical Engineering Symposium Talk at UT, Houston, January 15, 2009
91. Hasan, K.M.: Diffusion tensor Tractography of the Human Brain Fiber tracts across the lifespan. UT Medical Research Retreat Talk, Houston, Dec 5, 2008
92. Hasan, K.M.: Diffusion Tensor Imaging of the Spina Bifida Child Brain. First World Congress on Spina Bifida Research and Care. Orlando Florida, (Invited Talk), March 15, 2009
93. Ewing-Cobbs, L, Johnson C., Juranek J., Prasad M., Hasan K.M.: Diffusion Tensor Imaging of Association and Limbic Pathways Following Pediatric Traumatic Bbrain Injury: Effects of Age at Injury and Age at Scan. Neurotrauma. Santa Barbara, California (www.neurotrauma.org/2009), September 7-11, 2009
94. Hasan, K.M., Iftikhar, A., Xue, L., Kramer, L.A, Ewing-Cobbs, L: MRI Predictors of Outcome Following Pediatric Traumatic Brain Injury: Whole Brain White Matter and and Gray Matter Volumetry, T2 Relaxometry, and Diffusion Tensor Metrics, B169-P7. Santa Barbara, California (www.neurotrauma.org/2009), September 7-11, 2009
95. Kluth, J.T., Hasan, K.M., Cirino, P.T., Hannay, H.J., and Fletcher J.M.: Diffusion Tensor Tractography of Hypoplastic. Corpora Callosa in Spina Bifida.: Study. 38th Annual meeting of the international neuropsychological society. Acapulco, Mexico. Feb 3-6, 2010
96. Treble, A., Hasan, K.M., Iftikhar, A., Prasad, M., Barnes, M., and Ewing-Cobbs, L.: Working Memory and Callosal Integrity following Pediatric Traumatic Brain Injury: A Diffusion Tensor Tractography Study. 38th Annual meeting of the international neuropsychological society. Acapulco, Mexico. p183. Feb 3-6, 2010
97. Cox, C.S., Baumgartner, J.E., Worth, L., Harting, M.T., Ewing-Cobbs, L., Gee, A., Hasan, K.M., Shah, S., Walker, P., Day, M.C.: Phase I Clinical Trial of Autologous Bone Marrow Mononuclear Cells for Pediatric Severe Traumatic Brain Injury. Proceedings of the 59th Congress of Neurological Surgeons New Orleans, Louisiana, United States of America (http://www.cns.org/) October 24-29, #933, 2009
98. Kramer, L.A., Catalin, L., Matta E, Pilat, M., Garg, N, and Hasan, K.M.: Triple Inversion Recovery Imaging of Myocardial Infarction. Proceedings of the 18th Meeting of the International Society for Magnetic Resonance in Medicine, Stockholm, Sweden; p3655. 1-7 May, 2010
99. Xue, L., Hasan, K.M., Kramer, L.A., and Ewing-Cobbs, L.: Voxel-Based DTI of Longitudinal Changes Post Pediatric TBI Compared with Age-Matched Developing Controls. Proceedings of the 18th Meeting of the International Society for Magnetic Resonance in Medicine, Stockholm, Sweden; p3992. 1-7 May, 2010
100. Hasan, K.M., Walimuni, S.W., Humaira A, Kramer LA; Frye RE, Fletcher J.M. and Ewing-Cobbs L.: DTI, T2 Relaxation and Volumetry of the Human Brain Corpus Striatum across the Lifespan. Proceedings of the 18th Meeting of the International Society for Magnetic Resonance in Medicine, Stockholm, Sweden; p606 (Talk). 1-7 May, 2010.
101. Hasan, K.M.: Diffusion Tensor Imaging Quantification and Quality Control. Proceedings of the 18th Meeting of the International Society for Magnetic Resonance in Medicine Stockholm, Sweden. (Invited Weekend Educational Talk), 1-7 May, 2010.
102. Treble, A., Hasan, K.M., Swank P.R, Iftikhar A., Fletcher J.M., Ewing-Cobbs L. Predicting Verbal and Visuospatial Working Memory Deficits following Pediatric Traumatic Brain Injury through Callosal Subregion Integrity: A Diffusion Tensor Tractography Study. Thirty-Ninth Annual Meeting International Neuropsychological Society, Boston, Massachusetts. February 2-5, 2011

103. Walimuni I.S. and Hasan, K.M. Brain Atlas-based Study of the Interplay between Normal Tissue Microstructural MRI Parameters. 19th Annual Meeting and Exhibition of International Society for Magnetic Resonance in Medicine 7-13 May, Montréal, Québec, Canada; #4962, 2011.
104. Hasan, K.M., Walimuni, I.S., Kramer, L.A., and Ewing-Cobbs, L. Atlas-based T2 Relaxometry of the Developing Child Brain: Serial and Cross-sectional Analysis 19th Annual Meeting and Exhibition of International Society for Magnetic Resonance in Medicine 7-13 May, Montréal, Québec, Canada. #1880, 2011
105. Hasan, K.M., Walimuni, I.S., Abid, H., Datta, S., Nelson, F., Wolinsky, J.S., and Narayana P.A. Brain Atlas-based Lesion Spatial Distribution and Modeling of Wallerian Degeneration In Multiple Sclerosis 19th Annual Meeting and Exhibition of International Society for Magnetic Resonance in Medicine 7-13 May, Montréal, Québec, Canada, #4617, 2011
106. Hasan, K.M., Walimuni, I.S., Abid, H., Datta, S., Nelson, F., Wolinsky, J.S., and Narayana P.A. Atlas-based Quantification of Brain Normal-Appearing White and Gray Matter Volume, Relaxation Time and Diffusion Tensor Metrics in Multiple Sclerosis. 19th Annual Meeting and Exhibition of International Society for Magnetic Resonance in Medicine 7-13 May, Montréal, Québec, Canada; #4482 (Talk), 2011
107. Hasan, K.M.: Fundamental of Diffusion Tensor Imaging, Computation and Visualization applied to the Human Brain. Invited Talk at the school of Computing at the University of Southern Mississippi Hattiesburg June 27-28, 2011
108. Hasan, K.M., Walimuni, I.S. and Frye, R.E: Global and Regional Multimodal Neuroimaging Markers of the Neurobiology of Autism: Development and Cognition. Cell Symposia: Autism Spectrum Disorders: From Mechanisms to Therapies. November 9-11, Sheraton National Hotel, Arlington, VA, USA, #108, 2011
109. Kramer, L.A., Sargsyan, A, Hasan, K.M., Polk J.D., Hamilton, D.R: MR Imaging of the Orbits and Intracranial Structures after Exposure to Microgravity. 112th ARRS Annual Meeting, Vancouver, Canada, April 29 – May 4, 2012
110. Kramer, L.A., Sargsyan, A, Hasan K.M., Polk J.D., Hamilton, D.R: Orbital and Intracranial Affects of Microgravity: 3T MR Imaging. Accepted for the ASNR 50th Annual Meeting, New York, NY, April 23 – 26, 2012
111. Kramer, L.A., Sargsyan, A., Hasan K.M., Polk J.D., Hamilton, D.R: Orbital and Intracranial Effects of Microgravity: 3 Tesla MR Imaging Findings. AUR 60th Annual Meeting, San Antonio, TX, March 19 – 22, 2012
112. Alhamud, A., Tisdall, D., Hasan, K.M., van der Kouwe A.J.W, Meintjes, E.M.: Potential Misinterpretation of Diffusion Tensor Imaging Data due to Head Motion. 20th Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine, Milbourne Australia May 5-11, 2012
113. Hasan, K.M., Steinberg, J.L., Moeller, G.F., MA L., Frye, R.E., Narayana, P.A: Healthy Human Brain and Patient Customized Quantitative MRI Templates and their interplay using VBM. Organization for Human Brain Mapping meeting in Beijing, China June 10-14, #643, 2012
114. Kamali, A., Kramer, L.A., and Hasan, K.M.: Anatomical parcellation of the cortical-brainstem cerebellar white matter connections of the human brain: A diffusion tensor tractography-based study at 3.0 T and high spatial resolution. Presented at RSNA 94th Scientific Assembly and Annual Meeting, Dec, Chicago, Illinois. Educational Exhibit (# 6010781), 2008.
115. Kamali, A., Kramer, L.A., and Hasan, K.M.: Feasibility of Visual Pathways Tractography Using High-Resolution Diffusion Tensor Tractography Data on 3 T. Presented at the 47th

Annual ASNR Meeting, in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada, 18–21 May, 2009

116. Kamali, A., Kramer, L.A., and Hasan, K.M.: Feasibility of Prefronto-Caudate Pathway Tractography Using High-Resolution Diffusion Tensor Tractography Data at 3 T. Presented at the 47th Annual ASNR Meeting, in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada, 18 – 21 May, 2009
117. Kamali, A., Kramer, L.A., and Hasan, K.M.: High-Resolution Atlas of Human Brain White Matter Pathways: A Diffusion Tensor Tractography Study on 3.0 T. Presented at the 47th Annual ASNR Meeting, in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada, 18 – 21 May, 2009
118. Kamali, A., Kramer, L.A., and Hasan, K.M.: High Spatial Resolution Diffusion Tensor Tractography of the Human Brain Cortico-Ponto-Cerebellar Pathways. Presented at the 47th Annual ASNR Meeting in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS, Vancouver Convention and Exhibition Centre, Vancouver, BC, Canada, 18 – 21 May 2009.
119. Kamali, A., Kramer, L.A., and Hasan, K.M.: Feasibility of prefronto-caudate pathway tractography using high resolution diffusion tensor tractography data at 3 T. Presented at Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition. Honolulu, Hawai'i, USA #4084, 18 - 24 April, 2009
120. Kamali, A., Kramer, L.A., Butler, I.J., and Hasan, K.M.: Diffusion Tensor Tractography of the Somatosensory System in the Human Brainstem: Initial findings using high isotropic spatial resolution at 3.0 T. Presented at Magnetic Resonance in Medicine (ISMRM) 17th Scientific Meeting & Exhibition 18 -. Honolulu, Hawai'i, USA #4337, 24 April, 2009
121. Kamali, A., Kramer, L.A., and Hasan, K.M. Diffusion Tensor Tractography of the Human Visual System. Presented at RSNA 95th Scientific Assembly and Annual Meeting, Chicago, Illinois. Educational Exhibit (LL-NR4009-B04)., 2009
122. Kamali, A., and Hasan K.M.: Atlas of human visual pathways. A high resolution DTI tractography study on 3T. Presented at 88th Annual ACR Meeting and Chapter Leadership Conference (AMCLC), in Washington, D.C, May 14-18, 2011
123. Kamali, A., Brody J., Seddiqui A., Jasti, S.P., and Hasan, K.M.: Diffusion tensor tractographic dissection of human limbic pathways. Presented at ASNR 49th Annual Meeting in cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS at the Washington State Convention Center, Seattle, Washington. June 6th-9th, 2011
124. Kamali, A., Brody, J., and Hasan, K.M.: Tractographic dissection of human optic system. Presented at the 111th Annual Meeting of the American Roentgen Ray Society ARRS, to be held May 1-6, 2011 at the Hyatt Regency Chicago in Chicago, Illinois., 2011
125. Kamali, A., Brody JD, Saraiya, P.V., Litkouhi, B, Hasan, K.M. Dissecting the Human Brain Limbic Pathways: A High-Resolution DTI Tractography Study on 3 T. Presented at RSNA 97th Scientific Assembly and Annual Meeting, Nov 27th to Dec 2nd, Chicago, Illinois. Educational Exhibit (LL-NRE4162)., 2011
126. Kamali, A., Brody J.D., and Hasan, K.M.: High-Resolution in vivo Mapping the Human Brain White Matter Pathways: A Diffusion Tensor Tractography Study on 3.0 T. Electronic Poster (ePoster) #: eP-17, Presented at the ASNR 50th Annual Meeting held April 23-26, at the New York Hilton, 2012
127. Kamali, A., Brody J.D., and Hasan, K.M.: Tracing Prefrontal Connectivity of the Caudate Head Using High-Resolution Diffusion TensorTractography. Electronic Poster (ePoster) #:

eP-18 , Presented at the ASNR 50th Annual Meeting held April 23-26, at the New York Hilton., 2012

128. Kamali, A., and Hasan, K.M.: Tracing the hippocampal connection of the human brain. A high resolution DTI tractography study on 3T. Electronic exhibit E416, Presented at the 112th Annual Meeting of the American Roentgen Ray Society, held April 29-May 4, at Vancouver, Canada, 2012
129. Kamali, A., Hasan, K.M., Chiang, D.: Invivo Dissection of Human Brain White Matter Pathways. A Diffusion Tensor Tractography Study on 3.0 T. Electronic exhibit E416, Presented at the 112th Annual Meeting of the American Roentgen Ray Society, held April 29-May 4, at Vancouver, Canada., 2012
130. Kamali, A., Brody, J.D., Chern, J., Litkouhi, B., Jasti,, S.P., and Hasan, K.M.: Decoding the Human Brain Superior Longitudinal Fasciculus Pathways. A High Resolution Diffusion Tensor Tractography Study on 3 T. Presented at RSNA 98th Scientific Assembly and Annual Meeting, Nov 25th to 30th, Chicago, Illinois. Educational Exhibit (ID Number: 12031077), 2012
131. Alhamud A., Laughton, B., Hasan, K.M., van der Kouwe, A.J.W., Meintjes, E.M. Comparison of DTI Data in 5-year old children acquired using Standard and Navigated DTI Sequences International Society for Magnetic Resonance in Medicine 21st Meeting and Exhibition. Salt Lake City, Utah, USA, 20-26 April, 2013
132. Hasan, K.M., Liangsuo, M., Kramer, L.A., Lane, S.D., Steinberg, J.S., Narayana, P.A., and Moeller, G.F.: Diffusion Tensor Markers of the Neurobiology of Cocaine Addiction. International Society for Magnetic Resonance in Medicine 21st Meeting and Exhibition. Salt Lake City, Utah, USA (# 3659), 20-26 April, 2013
133. Hasan, K.M., Staewen, T.D., Wilde, E.A., Miller, E.R., Frisby, M., McCarthy, J.J., Hunter J.V., Levin, H.S., Robertson, C.S., and Narayana, P.A.: Serial Atlas-based DTI Study of Mild Traumatic Brain Injury in Adults. International Society for Magnetic Resonance in Medicine 21st Meeting and Exhibition. Salt Lake City, Utah, USA (# 2898), 20-26 April, 2013.
134. Hasan, K.M, and Narayana PA: Semiautomatic Segmentation and Quantification of Volume, T2 Relaxation time and Mean Diffusivity of the Human Brain CSF Compartments across the Lifespan. International Society for Magnetic Resonance in Medicine 21st Meeting and Exhibition. Salt Lake City, Utah, USA #3096), 20-26 April, 2013
135. Hakimelahi, R., Riascos, R., Hasan, K.M., Heymann, J., Cotes, C.C., Sargsyan, A., Alperin, N., Kramer, L.A.: 3 Tesla MR Characterization of the Optic Nerve Sheath in Astronauts. Oral presentation at: American Society of Neuroradiology; San Diego, CA., May, 2013.
136. Mwangi, B., Hasan, K.M., Soares, J.C.: Decoding and evaluation of cerebral maturation and aging patterns using Diffusion Tensor Imaging. Organization for Human Brain Mapping Annual Meeting. Seattle, WA, USA, 16-20 June, 2013
137. Kamali, A, Flanders, AE, and Hasan, K.M.: Tracing the superior parietal lobule connections of the human brain temporoparietal language pathways. A high resolution diffusion tensor tractography study on 3 T. Presented as electronic exhibit at the 113th Annual Meeting of the ARRS, to be held April 14-19, 2013 at Marriott Wardman Park Hotel in Washington, D.C., 2013
138. Kamali, A., Flanders, A.E., and Hasan, K.M.: Decoding the Superior Parietal Lobule Connections of the Superior Longitudinal Fasciculus in the Human Brain: A High-Resolution Diffusion Tensor Tractography Study on 3T. Electronic Poster (ePoster) #: eP-12. Presented as electronic exhibit at at the 51st ASNR Annual Meeting to be held May 18-23, in

cooperation with the ASFNR, ASHNR, ASPNR, ASSR and SNIS at the San Diego Convention Center., 2013

139. Kamali, A. and Hasan, K.M.:, Distinguishing the superior parietal lobule connections of the temporoparietal superior longitudinal fasciculus in the human brain using high resolution diffusion tensor tractography. Presented at RSNA 99th Scientific Assembly and Annual Meeting, Chicago, Illinois. Educational Exhibit. Dec 1th to 6th, 2013
140. Kamali, A., and Hasan, K.M.: Superior parietal lobule connections of the temporoparietal white matter pathways of the human brain. A high resolution diffusion tensor tractography. Presented at ASNR 52nd annual Meeting of the American Society of Neuroradiology as Electronic Poster (eP-09), Montreal, Quebec, Canada. May 17 – 22, 2014
141. Kamali, A., and Hasan, K.M.: Thalamo-amygdala and subthalamo-amydala connections of the human brain using high resolution diffusion tensor tractography on 3T. Presented as Electronic Education Exhibit (eEdE-12) for the 52nd Annual Meeting of the American Society of Neuroradiology at the ASNR Montreal, Quebec, Canada. May 17 – 22, 2014
142. Kamali, A., Jasti, S.P., Kancherla, R., Adapa, P., Hasan, K.M.: Tracing the Temporoparietal Connections of the Human Brain Using High Resolution Diffusion Tensor Tractography. Presented at RSNA 100th Scientific Assembly and Annual Meeting, Illinois. Electronic Exhibit NRE131 14007478, Chicago, Nov 30th to Dec 5th, 2014
143. Alhamud, A., Laughton, B., Hasan, K.M., van der Kouwe, A.J.W., Meintjes, E.M. Comparison of DTI Data in 5-year old children acquired using Standard and Navigated DTI Sequences International Society for Magnetic Resonance in Medicine 21st Meeting and Exhibition. Salt Lake City, Utah, USA 20-26 (# 3659), April 2013
144. Kramer, L., Sargsyan, A., Hamilton, D., Tarver, W., Powers, E., Hasan, K., Polk, J., Straube, U., and Shimada, K.: Magnetic Resonance Derived CSF Production Rate as a Predictor of Orbital Abnormalities after Microgravity Exposure Aviation, Space, Environemnetal Medicine (AsMA) Annula Scientific Meeting, May 12-16, 2013
145. Stosic, M., Han, X., Haque, M., Torres, L., Reynolds, J., Rogers, A., Jones, J., Proud, M., K.M. Hasan, and Maletic-Savatic, M.: Developmental Trajectories of Deep Gray Matter Structures In Healthy Children and Adults ISDN: 20th Biennial Meeting of the International Society of Development Neuroscience Montreal, Canada, July 19-24, 2014
146. Cao, B., Mwangi, B., Hasan, K.M., Soares J: Development and validation of a brain maturation index using longitudinal neuroanatomical scans. 21st Annual Neuroscience Poster Session at UT Neuroscience Research Center (Abstract and poster presentation), 2014
147. Schatz, B.S., Haque M.E., Hasan K.M. and Savitz S.: Integrity of Neuronal Fibers in the Corpus Callosum of Ischemic Stroke Patients Treated with Autologous Bone Marrow Derived Mononuclear Cells. Summer Research Program, Research Forum Oct. 21, 2014
148. Lund, S.M., Haque, M.E., Hasan, K.M., and Savitz, S.: Evaluation of the Arcuate Fasciculus with Diffusion Tensor Imaging in Ischemic Stroke Patients, Summer Research Program, Research Forum Oct. 21, 2014
149. Yozbatiran, N., Keser, Z., Hasan, K.M., O'Malley, M.K., Cooper-Hay, C., Frontera, J., Davis, M.M., Fregni, F., and Francisco, G.E.: Transcranial direct current stimulation (tDCS) of the primary motor cortex is a promising adjunct modality in improving arm and hand functions in chronic incomplete cervical spinal cord injury". The Mission Connect Annual Scientific Symposium, Houston, TX, December 5th, 2014.
150. Sam, K., Keser, Z., Hasan, K.M., Francisco, G.E., and Yozbatiran N.: Clinical correlates and quantification of white matter microstructure using diffusion tensor imaging in chronic cervical spinal cord injury". The Mission Connect 2014 Annual Scientific Symposium, Houston,TX, December 5th, 2014.

151. Keser, Z., Hasan, K.M., Yozbatiran, N., and Francisco, G.E.: Main Motor, Sensory and Cerebellar Pathways in Spinal Cord Injury. The Mission Connect 2014 Annual Scientific Symposium, Houston,TX, December 5th, 2014.
152. Yozbatiran, N., Francisco, G.E., Keser, Z., Hasan, K.M., O'Malley, M., Fregni, F., Davis, M.: Effects of combined transcranial direct current stimulation (tDCS) and robotic-assisted training on upper limb functions in chronic incomplete cervical spinal cord injury. American Association of Physiatry Meeting, San Antonio,TX, March 11th-15th, 2015
153. Yozbatiran, N., Keser, Z., Hasan, K.M., O'Malley, M.K., Cooper-Hay, C., Frontera, J., Davis, M.M., Fregni, F., and Francisco, G.E.: Transcranial direct current stimulation (tDCS) of the primary motor cortex is a promising adjunct modality in improving arm and hand functions in chronic incomplete cervical spinal cord injury. Submitted 9th World Congress of the International Society of Physical and Rehabilitation Medicine, Berlin, Germany, June 19th-23rd, 2015
154. Keser, Z., Hasan, K.M., Francisco, G.E., and Yozbatiran, N.: Effects of Combined Transcranial Direct Current Stimulation (tDCS) and Robotic-Assisted Arm Training (RAT) on the Main Motor, Sensory and Cerebellar Tracts in Spinal Cord Injury. Submitted to NYC Neuromodulation Conference, New York, January 9-11th, 2015
155. Cao, B., Mwangi, B., Hasan, K.M., Selvaraj, S., Zunta-Soares, G.B., and Soares, J.C.: Validating a cross-sectional brain development index with longitudinal brain images. International Society for Magnetic Resonance in Medicine Toronto, Canada May 30-June 05, 2015.
156. Haque, M.E., Hasan, K.M., Schatz, B.A., Lund, S.M., Vahidy, F.S., Savitz, S.I: Longitudinal quantitative MRI Provides Quality Assurance Measures in Patients with Ischemic Stroke Treated with Autologous Bone Marrow Derived Mononuclear Cells. International Society for Magnetic Resonance, Toronto, Canada May 30-June 05, 2015
157. Hasan, K.M., Keser, Z., Yozbatiran, N., and Francisco, G.E.: Diffusion Tensor Tractography of Human Spinocerebellar, Cortico-Ponto-Cerebellar and Dentate-Rubro-Thalamo-Cortical Pathways. International Society for Magnetic Resonance, Toronto, Canada May 30-June 05, 2015.
158. Levin, H., Wilde, L., Biekman, B., Li, X., Hasan, K.M., Narayana, P.A., Miller, E., McCauley, S., Hunter, J., McCarthy, J., and Robertson, C.: Is DTI A Neuroimaging Marker for mTBI with Loss of consciousness? Presented at 33rd National Neurotruma Symposium, New Mexico June 28–July 1, 2015 Santa Fe, New Mexico, 2015
159. Hasan, K.M., Mwangi, B., Behzad, B.B., Hakimilahi, R., Kramer, L.A. and Riascos, R.F: Longitudinal Quantitative MRI Measurements in Astronauts with short and Long-duration Microgravity Exposure. Talk presented at The 2016 NASA Human Research Program Investigators' Workshop (HRP IWS 2016; https://www.nasa.gov/hrp). February 8-11, 2016, at the Galveston Island Convention Center (GICC) in Galveston, TX., 2016
160. Lane, S.D, Hasan, K. M, Mwangi, B., Narayana, P.A., Vincent, J., Moeller, F.G., Steinberg, J.L., Dineley, K.T, Cunningham, K.A., and Schmitz, J.M.: Changes in Brain White Matter Integrity after PPAR-Gamma Agonist (Pioglitazone) Treatment for Cocaine Use Disorder. College on Problems of Drug Dependence Annual Meeting, June, 2016. Palm Springs, CA., 2016
161. Keser, Z., Yozbatiran, N., Hasan, K.M., & Philips, D., and Francisco, G.E.: Diagnostic Utility of Diffusion Tensor Imaging in Stroke Rehabilitation Poster presented at: World Congress of Neurorehabilitation, Philadelphia, PA., 2016
162. Yozbatiran, N., Keser, Z., Hasan, K.M., Karmonik, C., Anderson, J., and Francisco, G.E.: Structural Changes in Motor, Sensory, Cerebellar Tracts and Functional Connectivity

Associated with Therapy Response to Combined Transcranial Direct Current Stimulation and Robotic Arm Training in Spinal Cord Injury: Case Series Poster presented at: Association of Academic Physiatrists; Sacramento, CA, 2016

163. Nelson, F., Keser, Z., Mwangi, B., Narayana, P., Wolinsky, J., and Hasan, K.M.: Impaired inter/intra hemispheric connectivity, regional cortical thinning and deep gray matter damage are associated with cognitive impairment in MS. Poster presented at: European Comittee for Treatment and Research in Multiple Sclerosis (ECTRIMS); Barcelona, Oct 2015.
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167. JA Lincoln, L Freeman, L Staine, KM Hasan, R Gabr, PA Narayana, JS Wolinsky. Enhanced Regional Cerebral Perfusion Following Acetazolamide: Preliminary Results. ECTRIMS, Paris, France, 2017
168. Haque, M.E., Gabr, R.E., Zhao, X., Hasan, K.M., Narayana, P.A., Savitz, S.I., Aronowski, J. Quantitative Serial Neuroimaging of Iron in the Intracerebral Hemorrhage Pig Model. 17th International Stroke Conference, Houston Texas., 2017
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170. Riascos, R.F, Hasan, K.M., Mwangi, B., Behzad, B.B., Hakimilahi, R., Kramer, L.A.: Longitudinal Quantitative MRI Measurements in Astronauts Microgravity Exposure. Presented at The 2017 NASA Human Research Program Investigators' Workshop (HRP IWS 2017; https://www.nasa.gov/hrp) at the Galveston Island Convention Center (GICC) in Galveston, TX., Jan 23, 2017
171. Cao, B., Mwangi, B., Cavalcante Passos, I., Wu, M.J, Keser, Z., Zunta-Soares, G.B., Xu, D., Hasan K.M, and Soares, J.C.: Lifespan Gyrification Trajectory of Human Brain and Accelerated Aging of Major Psychiatric Disorders. Society for Human Brain Mapping Meeting, 2017
172. Gabr, R.E., Pednekar, A.S., Govindarajan, K.A., Sun, X., Riascos, R.F., Ramírez, M.G., Hasan, K.M., Lincoln, J.A., Nelson, F., Wolinsky, J.S., Narayana, P.A.: Patient-specific 3D FLAIR for enhanced visualization of brain white matter lesions in multiple sclerosis. Presented at the International Society for Magnetic Resonance In Medicine (ISMRM), Honolulu, HI, USA., 2017
173. Lincoln, J.A., Freeman, L., Gabr, R., Hasan, K.M., Narayana, P., Wolinsky, J.S.: Can Improving Cerebral Perfusion Impact the Evolution of Multiple Sclerosis Lesions? Presented at the Americas Committee for Treatment and Research in Multiple Sclerosis (ACTRIMS), Orlando, FL, USA, 2017

174. Hasan, K.M., Gabr, R.E., Lincoln, J.A., Narayana, P.A.: Toward Real Time Estimation and Quality Assurance for Myelin Water Mapping in the Human CNS. Presented at the International Society for Magnetic Resonance In Medicine (ISMRM), Honolulu, HI, USA., 2017
175. Hasan, K.M., Gabr, R.E., Lincoln, J.A., Narayana, P.A.: Real Time Estimation and Quality Assurance for Myelin Water Mapping in the Human CNS. Introduction to Quantitative MRI and Clinical applications. Gulf Coast Consortia MR Radiogeneomics Conference, March 31, 2017
176. Hasan, K. M.: Overview of MRI-based tissue contrast and ongoing clinical applications to map human brain microstructure and physiology in health and disease. Invited Talk. UThealth Center for Precision Health. Precision Medicine Day. https://www.uth.edu/cph/pmd/, April 13, 2017
177. Hasan, K.M.: Introduction to Quantitative MRI and Clinical applications. Invited Talk Department of Physical Medicine and Rehabilitation Grand Rounds Distinguished Lectureship Series, July 21, 2017
178. Hasan, K.M., Gabr, R.E., Lincoln, J.A., and Narayana, P.A.: Novel Multi-band accelerated, Reference-less, Multifaceted Icosahedral and Multishell Diffusion MRI Protocol for human whole brain clinical applications. International Society for Magnetic Resonance in Medicine ISMRM2018. Joint Annual Meeting ISMRM-ESMRMB, Paris, France. June 16-21, 2018
179. Rabiei, P., Behzad, B., Hasan, K., Kamali, A., Kramer, L., Riascos R. Pre- and Post-Flight Size Comparison of the Major Dural Venous Sinuses in Astronauts. Accepted for oral presentation at 2018 NASA Human Research Program Investigators' Workshop / Galveston Island Convention Center, Galveston, TX January 22-24, 2018
180. Rabiei, P., Behzad, B., Hasan, K., Kamali, A., Kramer, L., Riascos R. Pre- and Post-Flight Size Comparison of the Major Dural Venous Sinuses in Astronauts. Accepted for oral presentation at 2018 NASA Human Research Program Investigators' Workshop / Galveston Island Convention Center, Galveston, TX January 22-24, 2018
181. Riascos, R., Hasan, K., Mwangi, B., Behzad, B., B., Kamali, A., Hakimelahi, R., Rabiei, P., Sargsyan, A., Kramer, L.: Longitudinal Analysis of Quantitative Brain MRI in Astronauts Following Microgravity Exposure. Accepted for oral presentation at NASA Human Research Program Investigators' Workshop / Galveston Island Convention Center, Galveston, TX January 22-24, 2018
182. Zaza, R., Hakimelahi, R., Rabiei, P., Kamali, A., Hasan, K., Kramer, L., Riascos, R: Comparison of the use of volumetry vs linear height measurements to detect changes in the pituitary gland using 3D-T1W non-contrast MRI. Accepted for oral presentation at 2018 NASA Human Research Program Investigators' Workshop Galveston Island Convention Center, Galveston, TX, January 22-24, 2018
183. Zaza, R., Hakimelahi, R., Rabiei, P., Kamali, A., Hasan, K., Kramer, L., Riascos, R.: Comparison of the pituitary gland volume pre- and post-flight in astronauts. Accepted for oral presentation at 2018 NASA Human Research Program Investigators' Workshop Galveston Island Convention Center, Galveston, TX, January 22-24, 2018
184. Kramer, L.A, Hirzallah, M. I., Hasan, K. Younes, U. Menon, U. Macias, B, Stenger, M. and Narayana, P.: QUANTITATIVE MAGNETIC RESONANCE OF CEREBRAL BLOOD FLOW HEMODYNAMICS IN ACUTE HEAD DOWN TILT. NASA Human Research Program Investigators' Workshop Galveston Island Convention Center, Galveston, TX, January 22-24, 2018

185. Younes, K., Hasan, K.M., Mcgough, C.E., Kamali, A., Keser, Z., Melicher, T., Kramer, L.A., Schulz P.E.: Quantitative diffusion tensor tractography of the superior thalamic radiation and the corticospinal tract in relation to ventricular and sulcal CSF Volumes in patients with ventriculomegaly diagnosed with normal pressure hydrocephalus. American Academy of Neurology 70th Annual Meeting, Los Angeles, CA. April 21-27, 2018

186. Keser, Z., Hasan, K.M., Mwangi, B., Younes, K., Lincoln, J.A., Nelson, F.M. Micro and Macrostructural Limbic System Correlates of Comprehensive Cognitive Symptomatology in Multiple Sclerosis using Quantitative MRI and DTI. AAN 70th Annual Meeting. Los Angeles, CA. Apr 21-27, 2018

B. REFEREED ORIGINAL ARTICLES IN JOURNALS:
(Either in print or accepted for publication)

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2. Sato, T., **Hasan, K.M.**, Alexander, A.L., and Minato, K.: Structural connectivity in white matter using the projected diffusion-tensor distance. Medinfo 10(2):929-932, 2001.

3. Alexander, A.L., **Hasan, K.M.**, Lazar, M., Tsuruda, J., Parker, D.L.: Analysis of Partial Volume Effects in Diffusion-Tensor MRI Magn Reson Med; 45:770-780, 2001

4. **Hasan, K.M.**, Basser P.J., Parker, D.L., and Alexander, A.L. Analytical Computation of the Eigenvalues and Eigenvectors in DT-MRI. J Magn Reson 152:41-47, 2001.

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6. Witwer, B.P., Moftakhar, R., **Hasan, K.M.**, Praveen, D., Arfanakis, K., Haughton, V., Rowley H, Field A, Noyes J, Meyerand ME, Alexander A.L., and Badie B.: Diffusion Tensor Imaging of White Matter Tracts in Patients with Cerebral Neoplasms. Journal of Neurosurgery 97:568-575, 2002

7. Lazar, M., Weinstein, D.M., Tsuruda, J.S., **Hasan, K.M.**, Arfanakis, K., Meyerand, M.E., Badie, B., Rowley, H.A., Haughton, V., Field, A., and Alexander A.L.: White matter tractography using diffusion tensor deflection. Hum Brain Mapp 18:306-321, 2003.

8. Field, A.S., **Hasan, K.M.**, Jellison, B.J., Arfanakis, K., and Alexander, A.L.: Diffusion Tensor Imaging in an Infant with Traumatic Brain Swelling. AJNR Am J Neuroradiol 24:1461-1464, 2003

9. **Hasan, K.M.**, and Narayana, P.A: Computation of the Mean Diffusivity and Fractional Anisotropy Maps Without Tensor Decoding and Diagonalization: Theoretical Analysis and Experimental Validation. Magn Reson Med 50:589-598, 2003

10. **Hasan, K.M.**, Alexander A.L., and Narayana P.A.: Does Fractional Anisotropy Have Better Noise Immunity Characteristics than the Relative Anisotropy in Diffusion Tensor MRI: An Analytical Approach? Magn Reson Med 51:413-417, 2004

11. Field, A.S., Alexander, A.L., Wu, Y.C., **Hasan, K.M.**, Witwer, B., and Badie, B.: Diffusion tensor eigenvector directional color imaging patterns in the evaluation of cerebral white matter tracts altered by tumor. J Magn Reson Imaging 20(4):555-562, 2004

12. Hou, P., **Hasan, K.M.**, Sitton, C.W., Wolinsky, J.S., and Narayana P.A.: Phase Sensitive T1 Inversion Recovery Imaging: A Time Efficient Interleaved Technique for Improved Tissue Contrast in Neuroimaging. AJNR Am J Neuroradiol 26(6):1432-1438, 2005

13. Moeller, F.G., **Hasan, K.M.**, Steinberg, J.L., Kramer, L., Dougherty, D.M., Santos, R.M., Valdez, I., Swann, A.C., Barratt, E.S., and Narayana P.A.: Reduced Anterior Corpus Callosum White Matter Integrity as Measured by Diffusion Tensor Imaging is Related to Impulsivity in Cocaine-Dependent Subjects. Neuropsychopharmacology 30(3):610-617, 2005
14. Madi, S., **Hasan, K.M.**, and Narayana, P.A: Diffusion tensor imaging of in vivo and excised rat spinal cord at 7 T with an icosahedral encoding scheme. Magn Reson Med 53(1):118-125, 2005
15. Gupta, R.K., Saksena, S., Agarwal A., **Hasan, K.M.**, Husain, M., Gupta, V., and Narayana, P.A.: Diffusion Tensor Imaging in Late Posttraumatic Epilepsy. Epilepsia 46(9):1465-1471, 2005
16. Gupta, R.K., **Hasan, K.M.**, Trivedi, R., Pradhan, M., Das, V., Parikh, N.A., and Narayana, P.A.: Diffusion tensor imaging of the developing human cerebrum. J Neurosci Res. 81(2):172-178, 2005
17. Gupta, R.K., **Hasan, K.M.**, Mishra, A.M., Jha, D., Husain, M., Prasad, K.N., and Narayana, P.A.: High Fractional Anisotropy in Brain Abscesses versus Other Cystic Intracranial Lesions. AJNR Am J Neuroradiol 26(5):1107-1114, 2005
18. **Hasan, K.M.**, Gupta RK, Santos RM, Wolinsky J.S., and Narayana, P.A.: Fractional Diffusion Tensor Anisotropy of the seven segments of the Normal-Appearing White Matter of the Corpus Callosum in Healthy Adults and Relapsing Remitting Multiple Sclerosis. Journal of Magnetic Resonance Imaging 21(6):735-743, 2005
19. Trivedi, R., Gupta, R.K., **Hasan, K.M.**, Hou, P., Prasad, K.N., and Narayana, P.A.: Diffusion tensor imaging in polymicrogyria: a report of three cases. Neuroradiology 48(6):422-427, 2006
20. Gupta, R.K., Saksena, S., **Hasan, K.M.**, Agarwal, A., Haris, M., Chandra, M., Pandey, C.M., and Narayana, P.A.: Focal Wallerian Degeneration of Corpus Callosum in Large Middle Cerebral Artery Stroke: Serial Diffusion Tensor Imaging. Journal of Magnetic Resonance Imaging 24(3):549-555, 2006
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22. **Hasan, K.M.**: Diffusion tensor eigenvalues or both mean diffusivity and fractional anisotropy are required in quantitative clinical diffusion tensor MR reports: fractional anisotropy alone is not sufficient. Radiology 239(2):611-612, 2006 (Letter to the Editor)
23. Kale, R.A., Gupta, R.K., Saraswat, V.A., **Hasan, K.M.** Trivedi, R., Mishra, A.M., Ranjan, P., Pandey, C.M., and Narayana, P.A.: Demonstration of interstitial cerebral edema with diffusion tensor MR imaging in type C hepatic encephalopathy. Hepatology 43(4):698-706, 2006.
24. Ewing-Cobbs, L., Hasan K.M., Prasad, M.R.., Kramer L, and Bachevalier J. Relation of corpus callosum diffusion anisotropy and neuropsychological outcomes in twins disconcordant for traumatic brain injury. Am J Neuroradiol 27(4):879-881, 2006
25. Deo, A.A., Grill, RJ, **Hasan, K.M.**, and Narayana P.A.: In Vivo Longitudinal Diffusion Tensor Imaging of Experimental Spinal Cord Injury. J Neurosci Res 83(5):801-810, 2006.

26. **Hasan, K.M.**, and Narayana, P.A: Retrospective Measurement of the Diffusion Tensor Eigenvalues from Diffusion Anisotropy and Mean Diffusivity in DTI. Magnetic Resonance in Medicine 56(1):130-137, 2006

27. Haris, M., Gupta, R.K., Husain, N., **Hasan, K.M.**, Husain, M., Narayana, P.A: Measurement of DTI metrics in hemorrhagic brain lesions: possible implication in MRI interpretation. J Magn Reson Imaging 24(6):1259-1268, 2006

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29. Mosley, R.L., Benner, E.J., Kadiu, I., Thomas, M., Boska, M.D., **Hasan, K.M.**, Laurie, C., Gendelman HE: Neuroinflammation, oxidative stress, and the pathogenesis of Parkinson's disease. Clinical Neuroscience Research 6:261–281, 2006.

30. Ashtari, M., Cervellione, K.L., **Hasan, K.M.**, Wu, J., McIlree, C., Kester, H., Babak, A., Ardekani, B.A., Roofeh, D., Szeszko, P.R., and Kumra, S.: White Matter Development during Late Adolescence in Healthy Males: A Cross-Sectional Diffusion Tensor Imaging Study Neuroimage 35:501-510, 2007

31. Moeller, F.G., **Hasan, K.M.**, Steinberg, J.L., Kramer, L.A., Valdes, I., Lai, L.Y., Swann, A.C., and Narayana, P.A: Diffusion tensor imaging eigenvalues: Preliminary evidence for altered myelin in cocaine dependence. Psychiatry Research: Neuroimaging 154(3):253-258, 2007

32. Papanicolaou, A.C., **Hasan, K.M.**, Boake, C., Eluvathingal, T.J., Kramer, L.A.: Disruption of limbic pathways in a case of profound amnesia. Neurocase 13(4):226-826, 2007.

33. Moeller, F.G., Steinberg, J.L., **Hasan, K.M.**, Lane, S.D., Kramer, L.A., Buzby, M., Swann, A.C., and Narayana, P.A: Diffusion Tensor Imaging in MDMA Users and Controls: Association with Decision Making. American Journal of Drug and Alcohol Abuse 33(6):777-789, 2007

34. Breier, J.I., Maher, L.M., Schmadeke, S., **Hasan, K.M.**, and Papanicolaou, A.C.: Changes in Language-specific Brain Activation after Therapy for Aphasia using Magnetoencephalography: A Case Study. Neurocase 13(3):169-177, 2007.

35. Boska, M.D., **Hasan, K.M.**, Kibuule, D., Banerjee, R., McIntyre, E., Nelson, J.A., Hahn, T., Gendelman H.E., and Mosley, R,L.: Quantitative diffusion tensor imaging detects dopaminergic neuronal degeneration in a murine model of Parkinson's disease. Neurobiol Dis. 26(3):590-596, 2007

36. Eluvathingal, T.J., **Hasan, K.M.**, Kramer, L.A., Fletcher, J.M., and Ewing-Cobbs, L.: Quantitative diffusion tensor tractography of association and projection fibers in normally developing children and adolescents. Cerebral Cortex 17(12):2760-2768, 2007.

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41. Bockhorst, K.H., Narayana, P.A., Liu, R., Ahobila-Vijjula, P., Ramu, J., Kamel, M., Wosik, J., Bockhorst, T., Hahn, K., **Hasan, K.M.**, and Perez-Polo, J.R.: Early Postnatal Development of Rat Brain: In Vivo Diffusion Tensor Imaging. Journal of Neuroscience Methods 86(7):1520-1528, 2008
42. Poonawalla, A.H., **Hasan, K.M.**, Gupta, R.K., Ahn, C., Nelson, F., Wolinksy, J.S., and Narayana, P.A: Diffusion Tensor Imaging of Cortical Lesions in Multiple Sclerosis - Initial Findings. Radiology 246(3):880-886, 2008
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C. INVITED ARTICLES:

1. **Hasan, K.M.**, Parker D.L., and Alexander, A.L.: Magnetic resonance water self-diffusion tensor encoding optimization methods for full brain acquisition. Image Analysis & Stereology 21:87-96, 2002 (Invited).

2. **Hasan, K.M.**, and Narayana, P.A: DTI parameter optimization at 3.0 T: potential application in entire normal human brain mapping and in multiple sclerosis research. MedicaMundi 49(1):30-45, 2005 (Invited)

D. CHAPTERS:

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E. BOOKS:

1. **Hasan, K.M.**: Analysis, Optimization and Evaluation of Water Spin Self-Diffusion Tensor MRI Encoding. Ph. D. Dissertation, University of Utah, Salt Lake City, 2000.

F. OTHER PROFESSIONAL COMMUNICATIONS:

1. Presentations

- **Hasan K.M.**, and Narayana, P.A.: Theoretical, Technical and Computational Issue in Water Diffusion Tensor Magnetic Resonance Imaging of the Full Human Brain. Houston Society for Engineering, Biology and Medicine April 4, 2003 (Invited Talk)
- **Hasan, K.M:** Applications of Diffusion Tensor Imaging of the Entire Human Brain. University of Texas at Houston Medical School Research Retreat. The Woodlands, Texas February 13, 2004 (Invited Talk).
- **Hasan, K.M.**: Current Research Issues in Water Diffusion Tensor Mapping using Magnetic Resonance Imaging. Biostatistics Seminar, UT School of Public Health. Houston, March 22, 2004 (Invited Talk).
- **Hasan, K.M.:** Diffusion Tensor Imaging of Wallerian Degeneration: Application to Multiple Sclerosis. University of British Coloumbia, Vancouver, Canada Dec 1st, 2004 (Invited Talk).
- **Hasan, K.M.:** Diffusion Tensor Imaging of Wallerian Degeneration: Application to Multiple Sclerosis. University of Texas Houston, Grand Rounds in Neurology Feb 04, 2005 (Invited Talk).
- **Hasan, K.M.:** Applications of Diffusion Tensor Imaging to Human Brain Mapping**.** University of Nebraska Medical School, Omaha, Jul 14, 2005 (Invited Talk).
- **Hasan, K.M.:** Diffusion Tensor Imaging of the Corpus Callosum in Multiple Sclerosis and Healthy Adults. University of Texas Houston, UofT, Research Retreat, the Houstonian March 04, 2005 (Invited Talk).

- **Hasan, K.M.**: Diffusion Tensor Imaging of the Human Brain. Department of Diagnostic Imaging wide Research Seminar. Houston, Texas. June, 2006 (Invited Talk).
- **Hasan, K.M.,** Kamali, A., Juranek J., Kramer L.A..: Mapping the Human Brain Fiber Tracts Relative to Deep and Cortical Gray Matter Using Diffusion Tensor Imaging at High Angular and Spatial Resolution. The Houston Society for Engineering in Medicine and Biology (HSEMB 08 Conference), Houston, **02/07/2008** (Invited Talk).

2. Letters to the Editor

- **Hasan, K.M.**: Micro, Macro, and Function Relations of the Human Corpus Callosum Remain Challenging (eLetter Published on Line 12/04/2007 by Journal of Neuroscience on Wahl, M., Lauterbach-Soon, B., Hattingen, E., Jung, P., Singer, O., Volz, S., Klein, J.C., Steinmetz, H., Ziemann, U.: Human motor corpus callosum: topography, somatotopy, and link between microstructure and function. J Neurosci. 27(45):12132-12138, 2007.

3. Scientific Exhibits

- Zegarra, S., Field, A., Alexander, A.**, Hasan, K.M.**, Arfanakis, K., Badie, B.: Diffusion Tensor Imaging and Tractography of Cerebral White Matter: Review of Fiber Tract Anatomy and Tumor Imaging Patterns. Annual Meeting of the Radiological Society of North America. Chicago, IL. Magna Cum Laude, Dec. 2002.

4. Other (Teaching Activities)

- **Hasan, K.M.**: Fundamentals of Diffusion Tensor Imaging, Journal Club and Workshop Training Series of **10 Lectures** in the MRI Research Lab in Houston, Texas, 2003-2007.
- **Hasan K.M**.: Iron Mapping Using Magnetic Resonance Imaging Methods. A special Review Talk given in Houston, MR Research lab, Feb 1, 2009
- **Hasan, K.M.**: Fundamentals of Quantitative MRI: Iron and Perfusion Mapping and application to Normal Human Brain Development, aging and Multiple Sclerosis **10 Lectures** in the MRI Research Lab in Houston, Texas, 2008-2016.
- **Hasan, K.M:** Introduction to Quantitative MRI and Applications in Health and Disease across the Human Lifespan Workshop and Hands on Training, DTI-lab, Houston (June 10 - Jul 10, 2016)
- Workshop in Bethesda, Maryland NIH Diffusion Tensor MRI 2000
- Workshop in Minneapolis, Minnesota High Field MR imaging, MR Imaging of Brain Function and Hands on fMRI training course 2001
- Workshop in Saint-Malo, France ISMRM Diffusion MRI: Biophysical Issues 2002
- Workshop on Methods for Quantitative Diffusion MRI of Human Brain 13-16 March 2005, Alberta, CA
- Workshop on MRI in Multiple Sclerosis; Effective Communication with Neuroradiology and the Multiple Sclerosis Neurologist Feb 27-March 1, 2009. Houston, Texas
- Workshop on Astronaut health in Space. “3T Brain MRI-Clinical Applications for Intracranial Pressure Evaluation" sponsored by Space Medicine Division and Johnson Space Center and held at Wyle 1, CHR Conference Room, 1290 Hercules, Houston, TX 77058, August 26-27, 2010

- Investigators' Workshop on “Studying the Physiological and Anatomical Cerebral Effects of CO2 and Tilt (**SPACE-COT**)” Held at the Rice-Baylor National Space Biomedical Research Institute's headquarters and Baylor College of Medicine's Center for Space Medicine Houston, Texas Dec 7 and 8, 2015. Lead PI: PI. Eric Bershad, MD., Baylor College of Med. http://spaceref.com/space-medicine/spacecot-study-conditions-like-those-on-the-international-space-station.html & http://nsbri.org/