

Sujatha Kannan, MD  
8/12/10

Date of preparation:  
05/24/10

\_\_\_\_\_  
Signature

## Sujatha Kannan, MD

### Office Address:

Critical Care Medicine  
Children's Hospital of Michigan  
3901, Beaubien, Detroit, MI 48375  
**Ph:** (313) 745 5630  
**E-mail:** skannan@med.wayne.edu

---

### EDUCATION

M.B.B.S.	Jawaharlal Institute of Post graduate Medical Education and Research, Pondicherry, India	7/89 - 3/95
----------	--	-------------

### POST GRADUATE TRAINING

<b>Internship</b> Transitional year Residency	University of South Dakota Sioux Falls, South Dakota	7/1/96-6/30/97
<b>Residency</b> Pediatrics	University of Illinois Chicago, Illinois	7/1/97-6/30/98
<b>Residency</b> Pediatrics	Children's Hospital of Michigan Wayne State University, Detroit	7/1/98-6/30/00
<b>Fellowship</b> 6/30/03 Pediatric Critical Care Medicine	Children's Hospital of Michigan Wayne State University, Detroit	7/1/00-

### FACULTY APPOINTMENT

<b>Associate Professor (Research Educator)</b> Department of Pediatrics Wayne State University	Children's Hospital of Michigan	8/10-Present
<b>Assistant Professor (Research Educator)</b> Department of Pediatrics Wayne State University	Children's Hospital of Michigan	9/1/03-Present
Research Educator, tenure track		9/1/08-present

## HOSPITAL APPOINTMENT

**Staff Intensivist** Children's Hospital of Michigan 9/1/03-Present  
Division of Pediatric Critical Care  
Division of Clinical Pharmacology and Toxicology

## MAJOR PROFESSIONAL SOCIETIES

Society for Neuroscience  
International Society for Cerebral Blood Flow and Metabolism  
Society of Critical Care Medicine

## MEDICAL LICENSURE

Michigan Board of Medicine License Permit ID #4301072890

## BOARD CERTIFICATION

American Board of Pediatric Critical Care Medicine #1212 Expiration date 2011  
American Board of Pediatrics #070226; Expiration date 2014

## ACADEMIC HONORS AND AWARDS

1. **Sheldon Brenner Award** for Best Resident Research Project 2000  
Children's Hospital of Michigan (among approximately 60 pediatric residents)  
for work on *Bleeding and Coagulation Changes during Spinal Fusion Surgery*
2. **Wolfe Zuelzer Award** for Best Fellowship Research Project 2002  
Children's Hospital of Michigan (from around 25 fellows of various pediatric  
subspecialties) for work on *Targeted Drug Delivery using polymeric  
Nanostructures*
3. **WSU SOM Teaching Award** 2007

## SERVICE

### Patient Care

**Staff Intensivist** Children's Hospital of Michigan 9/2003-Present

### Committees

#### **Division:**

Scholarship Oversight Committee for Critical Care fellows: Review and evaluate research progress for all critical care fellows once every 4 months as part of American Board of Pediatrics requirement and advise program director on fellow's progress and if they meet board requirements for scholarly activity.

#### **University:**

Part of Wayne State University Nanotherapeutics Group.

### Scholarly Service

### **National**

2005-2008 Writing questions for the Pediatric Critical Care subboard of American Board of Pediatrics

(Involves reviewing content specifications for the topic, referring appropriate literature, developing the stem of the question as a case scenario and providing distracters with the most possible answer. A detailed explanation and rationale has to be provided with each question. Requires around 6 hours of preparation for each question, and 5 questions per year. Total time of 30 hours)

### **Service for Peer Reviewed Journals**

Review manuscripts for American Journal of Obstetrics and Gynecology, Biomaterials.

### **Hospital**

- Established protocol for management of hyperkalemia for the hospital in collaboration with Pediatric Emergency Medicine and Nephrology. 2004
- Established Continuous Renal Replacement Therapy (CRRT) protocols for the Pediatric ICU. Train nursing staff and fellows in the ICU regarding use of CRRT in the ICU. 9/2003 to 01/2010.
- Helped establish protocols for use of thrombolytics and anti-coagulants and in the Pediatric ICU. 2004.

• Established protocol for management of head injury in the Pediatric ICU. (Protocols are periodically reviewed and updated as required) 2004 to 2009.

## **TEACHING**

### **1. Years at Wayne State University: 2003-present**

9/2003-present Bedside teaching for residents and fellows during rounds as attending on service (10 weeks a year) and on call at night (around 3 calls per month) since 2003. Weekly 2 lectures for residents on service with around 0.5-1 hour preparation time for each lecture.

9/2003-present Teaching rounds specifically for the pediatric critical care fellows (once every 8 weeks with 4-5 hours preparation time for the lectures). Involved in weekly board reviews and journal clubs for pediatric ICU fellows (1 hour preparation time).

1/2005-1/2009 Board reviews for all pediatric residents annually (Involves 4 hours of preparation time each time with 1-2 reviews annually).

### **2. Course or curriculum development:**

- Helped develop board review curriculum for Pediatric Critical Care fellows.

(Reviewed content specifications and developed topics and questions for discussion/presentations that would help prepare the fellows for the critical care boards)

### 3. Research mentoring:

- Post doctoral research fellows:
  - Supervised Omathanu Pillai Perumal in the lab (11/2003 to 7/2005). For work on Cell entry of Dendritic Nanopolymers and for investigation of Novel Nanodevices for delivery of NSAIDs. Currently is Assistant Professor in Pharmaceutics at University of South Dakota.
  - Supervised Xiangtao Wang in the lab (2/2005-5/2006) for work on "Novel nanodevices for thrombolysis", conjugation and in-vitro characterization of Streptokinase-dendrimer conjugates. Currently is a faculty with the Chinese Academy of Medical Sciences.
  - Supervised Fadoua Saadani-Makki (5/2005-10/2008) in the lab for work on "Imaging and Targeted therapy using dendritic nanopolymers in perinatal brain injury". Currently in Switzerland, looking for industrial positions.
  - Supervising Hui Dai (12/2007-present) in the lab for work on "Imaging and Targeted therapy using dendritic nanopolymers in perinatal brain injury". **Won the best poster award at WSUSOM annual postdoctoral scholars day, 2008.**
  - Supervised Bing Wang (1/2008-3/2010) for "Development of guinea pig model of E.Coli induced chorioamnionitis and in vitro studies of dendrimers-drug conjugates".
  - Supervising Bindu Balakrishnan (10/2008-present) in the lab for work on "PET imaging and therapy of Perinatal brain injury".
- Graduate students
  - Supervised Rajyalakshmi Inagapolla (1/2005-12/2006) for part of her thesis work on mechanisms of cell entry of dendritic nanopolymers and characterization of streptokinase-dendrimer conjugates using SDS-PAGE and GPC. Currently working in the industry.
- Critical Care Fellows
  - Mentoring Penelope Sandiford (Year I Critical Care fellow: 10/2006-present) in the lab for work on Microglial Activation and neuronal cell death in perinatal brain injury. **Nominated for best fellowship research project by Society of Critical Care Medicine (2009). Won Wolf-Zuelzer award for best fellow research (2009).**
- Residents/Students
  - Mentored Sarah Kizilbash (Pediatric resident PGYII; July 2007) in the lab for work on in vitro studies on inhibition of microglial cells using minocycline-dendrimer conjugates.
  - Mentored Lauren Fink (Undergraduate Student, Oberlin College, June-August 2007) in the lab for work on characterization of microglial cell morphology in vivo in rabbit model of perinatal brain injury. Currently graduate student in Neuroscience.

**4. Visiting Professor/Lecturer:**

Visiting Professor at Safar Institute of Brain Injury, Pittsburgh March 2008.  
Invited lecture and discussion with research trainees and critical care fellows

**GRANT SUPPORT**

**CURRENT**

1. 1K08HD050652-01A2, NICHD, NIH 09/07 – 08/11  
Imaging and therapy in intrauterine inflammation induced perinatal brain injury  
PI: Sujatha Kannan
2. Wilson Medical Foundation Grant: Research Grant for Discovery in the  
-Biomedical Sciences 01/08-01/10  
[In vivo evaluation and imaging of dendrimer nanodevices targeting neuroinflammation: Applications in Cerebral palsy and Macular Degeneration.](#)  
PI: RM Kannan  
Role: Co-Investigator
3. NIH/NICHD Perinatology Research Branch 09/07-09/10  
Dendrimer based functionally optimized nanodevices for diagnosis and treatment  
of chorioamnionitis  
(PRB Nanotechnology Lab)  
PI for subcontract: RM Kannan  
Role: Co-PI
4. NIH/NICHD Perinatology Research Branch 07/04-10/08  
Imaging and Targeted therapy in Perinatal Brain Injury  
PI for subcontract: Sujatha Kannan

**PREVIOUS**

5. Pediatric Critical Care Scientist Development Program-NICHD 01/05-06/07  
Imaging and Targeted therapy in Perinatal Brain Injury  
PI for Sub-contract: S. Kannan
6. WSU Nanomaterials Pilot Initiative Grant 05/07-04/08  
In vivo imaging and evaluation of dendrimer nanodevices in neuroinflammation  
Co-PIs: Sujatha Kannan and Ray Iezzi
7. Wayne State University Nanoscience Collaborative for Research in  
Nanotechnology 11/05-11/06  
Novel Dendritic Nanodevices for Targeted Drug Delivery  
Role: Co-Investigator
8. Pfizer Scholars Grant 2004 07/04-06/06  
Investigation of Novel Nanodevices for Controlled Delivery of NSAIDS in a rodent  
model of pain  
PI: S. Kannan

9. Children's Research Center of Michigan 07/04-06/06  
Novel Nanodevices for thrombolysis in children  
PI: S. Kannan
10. Wayne State University Research Enhancement Program 05/04-04/06  
Development and Application of Novel Dendritic Nanodevice platforms  
for Targeted Drug Therapy in Children  
Role: Co-Investigator

**CLINICAL TRIALS ACTIVITIES:**

PET imaging of chorioamnionitis induced perinatal brain injury  
Role: PI

**PATENTS:**

1. Dendrimer-containing particles for sustained release of compounds, R. Kannan, R. Iezzi, **S. Kannan**, US/International patent filed, PCT/US08/78988, Oct 2008.
2. Dendrimer based nanodevices for maternal fetal applications. R Kannan, **S Kannan**, R Romero, R Navath, H Dai, Y Kortoglu, B Wang. Invention disclosed, June 09. Provisional patent application # 61187263, June 2009. US Patent and International PCT filed (May 2010)
3. Injectible dendrimer hydrogel nanoparticles, R.M. Kannan, **S.Kannan**, R.Romero, R. Navath, A.Menjoje, provisional patent filed, 61/319289, 3/10

**PUBLICATIONS**

***(Primary and corresponding author for all manuscripts marked as Kannan S. \* indicates first authors who are residents or research assistants who worked under direct supervision and guidance of S. Kannan)***

**Original Observations in Refereed Journals:**

1. Kannan S, Meert K, Mooney J, Warriar I. Bleeding and Coagulation Changes During Spinal Fusion Surgery: A Comparison of Neuromuscular and Idiopathic Scoliosis Patients, Pediatric Critical Care, 2002; 3(4):364-9. Impact Factor: 2.33
2. Kohle P, Misra E, Kannan R, Kannan S, Lieh-Lai M. Drug Complexation, *in vitro* release and cellular entry of dendrimers and hyperbranched polymers, International Journal of Pharmaceutics, 2003; 259:143-160. *(All in vitro cell studies done by S. Kannan)* Impact Factor: 3.06. Cited 98 times.
3. Meert K, Kannan S, Mooney J. Predictors of Red Cell Transfusion in Children and Adolescents undergoing Spinal Fusion Surgery, Spine, 2002;27(19):2137-42. Impact factor: 2.793. Cited 31 times. Abstracted in the Year Book of Anesthesiology, 2004
4. Kannan S, Kohle P, Raykova V, Glibetic M, Kannan RM, Lieh-Lai M, Bassett D. Effect of dendrimer end functionality on the dynamics of cellular entry and

- drug delivery in lung epithelial cells, *Biomater. Sci. Polymer Edn*, 2004; 15(3):311-30. Impact Factor: 2.158. Cited 43 times.
5. Kolhe P, Khandare J, Kannan RM, Pillai O, Kannan S, Lieh-Lai M. Hyperbranched polymer-drug conjugates with high drug payload for enhanced cellular delivery, *Pharm. Res.* 2004; 21;2185-2195. (*All in vitro cell studies done by S. Kannan*) Impact Factor: 3.441
  6. Khandare J, Kolhe P, Pillai O, Kannan S, Lieh-Lai M, Kannan RM. Synthesis, cellular transport and activity of PAMAM dendrimer-methylprednisolone conjugates, *Bioconjugate Chem*, 2005; 16(2); 330-337. (*Responsible for all in vitro cell studies*). Impact Factor:4.58. Cited 44 times.
  7. Kolhe P, Khandare J, Pillai O, Kannan S, Lieh-Lai M, Kannan RM. Preparation, cellular transport, and activity of polyamidoamine-based dendritic nanodevices with a high drug payload, *Biomaterials*, 2006; 27(4):660-9. (*Responsible for all in vitro cell studies*) Impact Factor:6.646. Cited 38 times.
  8. Wang X\*, Inapagolla R\*, Kannan S, Lieh-Lai M, Kannan RM. Synthesis, Characterization and *In vitro* activity of Dendrimer-Streptokinase Conjugates, *Bioconjugate Chem*, 2007; 18(3):791-9. (*Corresponding author; First author and second author were post-doctoral fellow and graduate student who worked under the direct guidance of S. Kannan*) Impact Factor:4.58
  9. Kannan S, Saadani-Makki F, Muzik O, Chakraborty P, Mangner TJ, Janisse J, Romero R, Chugani D. Microglial activation in perinatal rabbit brain induced by intrauterine inflammation: Detection with [11C](R)-PK11195 and microPET, *Journal of Nuclear Medicine*, 48(6), 946-54, 2007. (*Corresponding author*). Impact Factor:6.662
  10. Saadani-Makki F\*, Kannan S, Lu X, Janisse J, Dawe E, Edwin S, Romero R, Chugani D. Intrauterine administration of endotoxin leads to motor deficits in a rabbit model: a link between prenatal infection and cerebral palsy. Oct 7, 2008, *AJOG*. (*Corresponding author on manuscript. First author was post-doctoral fellow who worked under direct supervision and guidance of S. Kannan.*) Impact Factor:3.453
  11. Perumal OP\*, Inapagolla R\*, Kannan S, Kannan RM. The effect of surface functionality on cellular trafficking of dendrimers. *Biomaterials*. 2008 Aug-Sep;29(24-25):3469-76. (*Corresponding author on manuscript. First author and second author were post-doctoral fellow and graduate student who worked under direct supervision and guidance of S. Kannan*) Impact Factor:6.646
  12. Navath R, Kurtoglu Y, Wang B, Kannan S, Romero R, Kannan RM. Dendrimer-drug conjugates for tailored intracellular drug release based on glutathione levels. *Bioconjug Chem*. 2008 Dec;19(12):2446-55. (*Responsible for all in vitro cell work and testing*) Impact Factor:4.58
  13. Kurtoglu YE, Navath RS, Wang B, Kannan S, Romero R, Kannan RM. Poly(amidoamine) dendrimer-drug conjugates with disulfide linkages for intracellular drug delivery. *Biomaterials*. 2009 Apr;30(11):2112-21. Epub 2009 Jan 25. (*Responsible for in vitro cell work and characterization*). Impact Factor:6.646
  14. Perumal O\*, Khandare J, Kohle P, Lieh-Lai M, Kannan S, Kannan RM. Effects of branching architecture and linker on the activity of hyperbranched

- polymer-drug conjugates. *Bioconjugate Chemistry*. 2009 Apr 29. [Epub ahead of print] (*Corresponding author on manuscript*) Manuscript selected for Faculty of 1000 Biology, 2009 an award-winning online service that highlights and evaluates the most interesting papers published in the biological sciences based on recommendations by top researchers in the field. Impact Factor:4.58
15. Saadani-Makki F\*, **Kannan S**, Malek M, Janisse J, Muzik O, Romero R, Chugani D. Intrauterine endotoxin administration leads to white matter diffusivity changes in newborn rabbits. *Sep;24(9):1179-89. Journal of Child Neurology*, Jan, 2009. (*Corresponding author on manuscript, First author post doctoral fellow who worked under direct supervision of S. Kannan*) Impact Factor:1.43
  16. Wang B\*, Navath R, Romero R, **Kannan S**, Kannan R. Anti-inflammatory and anti-oxidant activity of anionic dendrimer-N-acetyl cysteine conjugates in activated microglial cells. *Int J Pharm*. 2009 Jul 30;377(1-2):159-68. Epub 2009 May 2. (*Equal primary author and co-corresponding author; first author is a post-doctoral fellow who worked under the direct supervision of S. Kannan*). Impact Factor: 3.06
  17. Kurtoglu YE, Mishra MK, Kannan S, Kannan RM. [Drug release characteristics of PAMAM dendrimer-drug conjugates with different linkers](#). *Int J Pharm*. 2009 Oct 13. [Epub ahead of print]. (*Responsible for all in vitro cell work and testing*) Impact Factor: 3.06.
  18. Navath RS, Wang B, Kannan S, Romero R, Kannan RM. [Stimuli-responsive star polyethylene glycol conjugates for improved intracellular delivery of the drug in neuroinflammation](#). *J Control Release*. 2009 Nov 5. [Epub ahead of print]. (*Responsible for all in vitro cell work and testing*) Impact Factor 5.69.
  19. Menjoge AR, Navath RS, Asad A, Kannan S, Kim CJ, Romero R, Kannan RM. Transport and biodistribution of dendrimers across human fetal membranes: Implications for intravaginal administration of dendrimer-drug conjugates. *Biomaterials*. 2010 Mar 24. [Epub ahead of print]
  20. R.Navath, A.Menjoge, B.Wang, R.Romero, S.Kannan, R.M.Kannan\*. Amino acid functionalized dendrimers with hetero-bifunctional chemoselective peripheral groups for drug delivery', in press, *Biomacromolecules*, April (2010) (*impact factor:4.2*)
  21. H.Dai, R.Navath, B.Balakrishnan, B.Raja Guru, M.Mishra, R.Romero, R.M.Kannan\*, **S.Kannan\***. Intrinsic targeting of neuroinflammation by polyamidoamine dendrimers in a rabbit model of cerebral palsy, In press, *Future Medicine:Nanomedicine*, Apr. (2010)(*Impact factor: 6.1*)
  22. B. Wang, R.Navath, A.Menjoge, B.Balakrishnan, R.Bellair, H.Dai, R.Romero, S.Kannan, R.M.Kannan\*, Inhibition of bacterial growth and intramniotic infection in a guinea pig model of chorioamnionitis using PAMAM dendrimers, In press, *Int.J. Pharm.*, May (2010) (*Impact factor:3.06*).
  23. *Kannan S\*, Saadani-Makki F, Balakrishnan B, Dai H, Chakraborty P, Janisse J, Muzik O, Romero. R, Chugani D. Decreased cortical serotonin in neonatal*

*rabbits exposed to endotoxin in utero. In press, Journal of cerebral Blood Flow and Metabolism, 2010.*

**Case-Reports in refereed journals:**

24. Kannan S, McGreevy PS, Fullerton TE. Nonsteroidal antiinflammatory drug-induced duodenal web. South Dakota J Med, 1997, 50(11): 393-394
25. Kannan S, Mattoo TK. Diffuse Crescentic Glomerulonephritis in Bacterial Endocarditis. Ped Nephrol, 2001, 16:423-428.
26. Kearns-Sayre Syndrome presenting as complete heart block, Chawla S\*, Coku J, Forbes T, Kannan S. Pediatric Cardiology 2008 May;29(3):659-62. (Corresponding author; First author is a pediatric resident who worked under direct supervision of S. Kannan)

**Invited Reviews:**

27. Kannan S\*, Balakrishnan B, Muzik O, Romero R, Chugani D. PET Imaging of neuroinflammation. Invited review. Journal of Child Neurology, 2009 Sep;24(9):1190-9. (Corresponding author).
28. Kannan S, Chugani HT. Applications of PET imaging in the newborn nursery. Invited review. Seminars in Perinatology. In press, 2009.

**Peer reviewed electronic journals/websites:**

29. Reviewed by S. Kannan and K. Meert. PedsCCM Evidence Based Medicine Journal Club. "Nuckton TJ, Alonso JA, Kallet RH, Daniel BM, Pittet JF, Eisner MD, Matthay MA. Pulmonary dead-space fraction as a risk factor for death in the acute respiratory distress syndrome. N Engl J Med. 2002;346(17):1281-6."

**Book Chapters:**

1. Kannan S, Hypoglycemia; Diabetes Insipidus; Cushing Syndrome. In Pocket Pediatrics, Editors: Lieh-Lai M, Fiore M, Lee KJ, Lippincott Williams and Wilkins, Philadelphia, PA, 2001, 78-81.
2. Kannan S, Karpawich P. Cardiac Arrhythmias. In Pocket Pediatrics, Editors: Lieh-Lai M, Fiore M, Lee KJ. Lippincott Williams and Wilkins, Philadelphia, PA, 2001, 31-40.
3. Kannan S, Rapid Sequence Intubation; Conscious Sedation; Procedures: Intraosseous Needle Placement; Endotracheal Intubation. In Pediatric Acute Care, Editors: Lieh-Lai M, Ling-McGeorge K, Asi-Bautista M, 2<sup>nd</sup> Edition, Lippincott Williams and Wilkins, Philadelphia, PA, 2001, 278-281; 293-294; 270-273
4. Pillai O, Kannan S, Kannan RM. Cellular Interactions of Nano Drug Delivery Systems, Published in "Force Microscopy in Biology and Medicine" by Wiley & Co, 2005. Editor: Bhanu Jena
5. Kannan RM, Pillai O, Kannan S. Dendrimers and Hyperbranched Polymers for Drug Delivery. Accepted for publication in "Biomedical Applications of Nanotechnology" by John Wiley and Sons, 2006. Editor: Vinod Labhateswar
6. Kannan S, Sarnaik A. 'The Child with MODS', Published in Pediatric Emergencies, 2006. Editor: Meherban Singh.

**Selected abstracts presented at National Conferences (last 5 years):**

1. Enhanced Cellular Delivery of Anti-Inflammatory Drugs using nanopolymers. Kannan S, Pillai O, Khandare J, Kolhe P, Kannan RM, Lieh-Lai M. Presented at SCCM, Phoenix, January 2005.
2. Investigation of Novel Nanodevices for Delivery of NSAIDS. Kannan S, Perumal O, Lieh-Lai M, Kannan RM, Rajyalakshmi I. Presented at the Pfizer 2005 Medical Futures Forum, New York, March 2005.
3. 'Intracellular Drug Delivery using High Payload Dendritic Nanodevices' Omathanu Pillai, Jayant Khandare, Parag Kolhe, Sujatha Kannan, Mary Lieh-Lai, Rangaramanujam M. Kannan, Presented at AAPS in Baltimore, November 2005.
4. 'PET Imaging of perinatal brain injury', Kannan S, Saadani-Makki F, Chugani C, Romero R, Muzik O, Skoff R. Presented at SPR, 2006.
5. 'PET Imaging of intrauterine inflammation induced perinatal brain injury'. Sujatha Kannan, Fadoua Sadaani-Makki, Diane Chugani, Otto Muzik, Robert Skoff, Roberto Romero. Presented at Society for Neuroscience, 2006.
6. 'Intrauterine inflammation induced microglial activation detected by small animal PET correlates with white matter injury and development of motor deficits in the newborn rabbit', S Kannan, F Sadaani-Makki, O Muzik, P Chakraborty, T Mangner, X Lu, E Dawe, J Janisse, R Skoff, R Romero, D Chugani. Presented at Society for Neuroscience, Nov. 2007.
7. 'Maternal endotoxin exposure leads to neurobehavioral changes in the newborn rabbit', F Sadaani-Makki, S Kannan, O Muzik, P Chakraborty, T Mangner, X Lu, S. Edwin, J Janisse, R Romero, D Chugani. Presented at Society for Neuroscience, Nov. 2007.
8. 'Dendrimer-nanodevices in neuroinflammation: Applications in Cerebral Palsy and Macular Degeneration". Kannan S, Iezzi R, Kannan RM, Presented at ENATBio, Wayne State University, October 2007.
9. [11C] PK11195 PET is an imaging biomarker for the development of motor deficits in a rabbit model of intrauterine inflammation. Kannan S, Makki F, O Muzik, P Chakraborty, T Mangner, X Lu, J Janisse, R Romero, D Chugani. Presented at SPR, May 2008.
10. [11C] AMT uptake by small animal PET in a neonatal rabbit model of intrauterine inflammation induced brain injury, S. Kannan, F. Saadani-Makki, X. Lu, P. Chakraborty, H. Dai, O. Muzik, R. Romero, D. Chugani, Presented at Society for Neuroscience, Baltimore, 2008.
11. White matter changes in perinatal rabbit brain induced by intrauterine inflammation: detection by diffusion tensor imaging. F. Saadani-Makki, S. Kannan, M Makki, X Lu, H. Dai, J Janisse, R. Romero, D. Chugani, Presented at Society for Neuroscience, Baltimore, 2008.
12. Novel dendrimer-based nanodevices for delivery of therapeutics to activated microglia and astrocytes in a neonatal rabbit model of cerebral palsy. H Dai, R. Kannan, S. Kannan, F. Saadani-Makki, R. S. Navath, B. R. Guru, R. Romero Presented at Society for Neuroscience, Baltimore, 2008.
13. Enhanced delivery of n-acetyl cysteine to microglial cells using novel dendrimer based nanodevices, B. Wang, R. Navath, E. Yunus, R. Romero, R. Kannan, S. Kannan. Presented at Society for Neuroscience, Baltimore, 2008.

14. PAMAM dendrimers for the brain delivery of therapeutics for the treatment of cerebral palsy, S Kannan, H Dai, R Navath, B Balakrishnan, R Romero, RM Kannan. Presented at the International Dendrimer Society meeting, Stockholm, June 2009.
15. Brain tryptophan metabolism using small animal PET in a neonatal rabbit model of cerebral palsy, S Kannan, F. Saadani-Makki, B Balakrishnan, P. Chakraborty, H. Dai, O. Muzik, R. Romero, D. Chugani. Presented at the International Society for Cerebral Blood Flow and Metabolism, Chicago, June, 2009.

**INVITED TALKS (National and International):**

1. Kannan S, Saadani-Makki F, Chugani C, Romero R, Muzik O, Skoff R, Kuivaneimi H. 'Intrauterine inflammation induced perinatal brain injury', Pediatric Critical Care Colloquium, Utah Feb, 2006.
2. Kannan S. 'Maternal endotoxin exposure leads to motor deficits in a rabbit model: A link between prenatal infection and cerebral palsy', Presented at the Michigan Cerebral Palsy Society Conference in March, 2008.
3. Kannan S. 'Imaging and targeted therapy using novel nanopolymers in brain injury', Invited to present at the Safar Center for Resuscitation Research at University of Pittsburg, March, 2008.
4. Kannan S. 'PET Imaging of neuroinflammation as a predictor for development of cerebral palsy', Presented at the International Society of Cerebral Palsy program at Bled, Slovenia, April, 2008.
5. Kannan S. 'PET Imaging of neuroinflammation'. Invited to present at the Neurobiology of Disease in Children Conference, Santa Clara, California, Nov. 2008.
6. Kannan S. Imaging and targeted therapy in perinatal brain injury. Invited to present at the Society of Pediatric Research, Topic Symposium, Baltimore, Maryland, May 2009.
7. Panelist for the Synergy Seminar on "Surgical Site Infections: trying to Outfox Nature" at the 'Austen Bioinnovation Institute', Akron, January 20<sup>th</sup>, 2010.

**INVITED TALKS (Local):**

1. Kannan S, Saadani-Makki F, Chugani C, Romero R, Muzik O, Skoff R, Kuivaneimi H. Imaging of Intrauterine inflammation induced perinatal brain injury, Presented to the Perinatology Research Branch, December 2005.
2. Kannan S, Chugani C, Romero R, Muzik O, Skoff R. Chorioamnionitis induced perinatal brain injury, Presented at the PET Center Research meeting. May, 2006.
3. Kannan S, Saadani-Makki F, Chugani C, Romero R, Muzik O, Skoff R, Kuivaneimi H. Imaging of chorioamnionitis induced perinatal brain injury, Presented at the Center for Molecular Medicine and Genetics, November 2006.
4. Kannan S. 'Novel Imaging and Nanotherapeutic Options in Intrauterine Inflammation induced perinatal Brain Injury', Presented at Children's Hospital of Michigan Grand Rounds October 28<sup>th</sup>, 2007.
5. Kannan S and Kannan RM. Dendrimer-based targeted therapy in perinatal brain injury, Presented at the Perinatology Research Branch, September, 2008.

Sujatha Kannan, MD  
8/12/10

6. Kannan S. 'Imaging and targeted therapy in perinatal brain injury', Presented at Neurology Grand rounds, June 19<sup>th</sup>, 2009.