

# CURRICULUM VITAE

Xiaodi F. Chen, , B.M. (M.D.), M.Sc., Ph.D.

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## ADDRESS

Department of Pediatrics  
Women & Infants Hospital of RI  
The Alpert Medical School of Brown University  
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**Publications:** <https://www.ncbi.nlm.nih.gov/myncbi/xiaodi.chen.1/bibliography/public/>

## EDUCATION

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|-------------------|--|
| 10/2006 – 12/2009 | <b>Ph.D.</b> , Magna Cum Laude<br>Human biology<br>Philipps University, Marburg, Germany   |
| 10/2002 – 07/2006 | <b>M.Sc.</b><br>Neurobiology<br>Philipps University, Marburg, Germany  |
| 09/1991 – 07/1996 | <b>B.M. (US M.D. equivalent)</b><br>Clinical medicine<br>Shanghai Medical School of Fudan University, Shanghai, China<br>(Former: Shanghai Medical University) |

## POSTDOCTORAL TRAINING

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| 01/2010 – 04/2015 | Post-Doc Research Associate<br>Department of Pediatrics, Women & Infants Hospital of RI<br>The Alpert Medical School of Brown University, Providence, USA |
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## HONORS, AWARDS, AND CERTIFICATES

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|-------------|---|
| 2021        | <u>Certificate</u> : Essentials of Statistical Analysis (EOSA): Complete (Parts 1, 2, and 3), <i>The CITI Program</i>   |
| 2021        | <u>Certificate</u> : Completion for “Good laboratory Practices (GLP)” and “Good Manufacturing Practices (GMP)”, <i>The CITI Program</i>   |
| 2020        | <u>Certificate</u> : Completion for “GCP Essentials for Clinical Research Professionals (2.0)”, <i>TransCelerate BioPharma</i>  |
| 2017 – 2019 | <u>Certificate</u> : Completion for “Data Analyst with R Track”, “Data Visualization with R Track”, and “Statistics with R Track”, <i>DataCamp</i>  |
| 2009        | <u>Honor</u> : Ph.D. Thesis: <i>magna cum laude</i> in Human Biology<br><i>Philipps University of Marburg, Germany</i>  |
| 2001        | <u>Award</u> : <i>Shanghai Science and Technology Progress Award</i> (Third prize)<br>Project title: Bio-Plastics Engineering<br>Tianzhong Zheng, Caidong Liu, <b>Xiaodi Chen</b> , Keming Zhu. |

## ACADEMIC APPOINTMENTS

11/2023 – present	<b>Associate Professor (promoted)</b> The Alpert Medical School of Brown University
01/2021 – present	<b>Research Scientist</b> Department of Pediatrics, Women & Infants Hospital of RI
09/2016 – 12/2020	<b>Senior Researcher</b> Department of Pediatrics, Women & Infants Hospital of RI
07/2016 – present	<b>Assistant Professor</b> The Alpert Medical School of Brown University
05/2015 – 06/2016	<b>Instructor</b> The Alpert Medical School of Brown University
01/2010 – 04/2015	<b>Post-Doc Research Associate</b> The Alpert Medical School of Brown University
07/1996 – 06/2000	<b>Teaching and research associate</b> Shanghai Medical College of Fudan University, China (Former: Shanghai Medical University)

## INDUSTRIAL APPOINTMENTS

08/2003 – 10/2006	<b>Student Assistant</b> InterActive Systems, Association for Inter-Active Media GmbH Marburg, Germany (Part-time)
02/2005 – 04/2005	<b>Intern/Trainee</b> CRBA Oncology, Bayer-Schering AG Berlin, Germany

## HOSPITAL APPOINTMENT

07/1995 – 06/1996	<b>Clinic Internship and Rotations</b> Shanghai General Hospital, Shanghai, China
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## OTHER ACADEMIC AND PROFESSIONAL APPOINTMENT

02/2003 – 04/2006	<b>Teaching Assistant</b> Institute of Medical Sociology and Social Medicine Philipps University, Marburg, Germany (Part-time)
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## PROFESSIONAL AFFILIATIONS

2019 – Present	Member of Society for Pediatric Research
2013 – Present	Member of Sigma Xi The Scientific Research Society
2012 – Present	Member of American Physiological Society
2012 – Present	Member of The Endocrine Society
2011 – Present	Member of Society of Neuroscience

## PROFESSIONAL SERVICE

### NIH Grant Reviewer

10/2024	Developmental Brain Disorders (DBD) study section (NIH), Virtual
02/2024	Developmental Brain Disorders (DBD) study section (NIH), Washington DC
11/2022	Developmental Brain Disorders (DBD) study section (NIH), Virtual

### Editor-in-Chief

2023 – Present	<i>Clinical Pediatric Dermatology</i> by "Prime Scholars"
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### Associate Editor

2021 – Present	<i>Frontiers in Cellular Neuroscience</i> by "Frontiers"
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### Guest Editor

2023 – Present	<i>Cells</i> by "MDPI"
2023 – Present	<i>Frontiers in Physiology</i> by "Frontiers"

### Member of Editorial Board:

2021 – 2022	<i>Frontiers in Medicine, Nephrology Section</i> by "Frontiers"
2018 – 2022	<i>CPQ Neurology and Psychology</i> by "Cient Periodique"
2013 – 2021	<i>Child's Nervous System</i> by "Springer Nature"

### Ad hoc Reviewer:

2023 – Present	American Physiological Society (APS) Certified Reviewer
2013 – Present	Molecular Neurobiology, Life Sciences, Frontiers in Pharmacology, Frontiers in Cellular Neuroscience, Frontiers in Physiology, Frontiers In Neuroanatomy, Scientific Reports, American Journal of Translational Research, Behavioural Brain Research, AJP - Regulatory Integrative and Comparative Physiology, PLOS ONE, Frontiers in synaptic Neuroscience, Frontiers in Pediatrics, American Journal of Reproductive Immunology, Neuropsychiatric Disease and Treatment, Journal of medical virology, Heliyon, BMC Pharmacology and Toxicology, Child's Nervous System, American Journal of Perinatology, Journal of Integrative Neuroscience, Cellular and Molecular Biology, Journal of Pediatric Endocrinology and Metabolism, Tropical Medicine and Surgery, Clinical Pediatric Dermatology

### University Committee

2023 – Present	Brown University Radiation Safety Committee
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### Moderator for International Conference:

April 30, 2019	Platform: Pediatric Therapeutics and Pharmacology Pediatric Academic Societies Annual Meeting, Baltimore, MD, USA
April 24, 2022	Platform: Neurology IV: Basic-Translational Pediatric Academic Societies Annual Meeting, Denver, CO, USA

## PUBLICATIONS

### Original Publications in Peer-Reviewed Journals:

1. Shibin Cheng, **Xiaodi Chen**, and Aihua Liao. Editorial: Autophagy: unveiling the mechanisms and implications in health and disease. *Frontiers in Physiology*. 2024 Sep 29; Volume 15.
2. Lynn Bitar, Barbara S. Stonestreet, Yow-Pin Lim, **Xiaodi Chen**, Imran Mir, and Lina Chalak. Association between decreased cord blood inter-alpha inhibitor levels and neonatal encephalopathy at birth. *Early Human Development*. 2024 Jun;193:106036.
3. **Xiaodi F Chen**, Yuqi Wu, Boram Kim, Kevin V Nguyen, Ainuo Chen, Joseph Qiu, Andre R Santoso, Clemence Disdier, Yow-Pin Lim, Barbara S Stonestreet. Neuroprotective efficacy of hypothermia and Inter-alpha Inhibitor Proteins after hypoxic ischemic brain injury in neonatal rats. *Neurotherapeutics*. 2024 Apr;21(3):e00341.
4. Francesco Girolamo, Yow-Pin Lim, Daniela Virgintino, Barbara S Stonestreet, and **Xiaodi Chen**. Inter-alpha inhibitor proteins modify the microvasculature after exposure to hypoxia-ischemia and hypoxia in neonatal rats. *International Journal of Molecular Sciences*. 2023 Apr 4;24(7):6743.
5. **Xiaodi Chen**, Shadi Nawaf Malaeb, Jonathan Pan, Laishuan Wang, and Joseph Scafidi, Editorial: Perinatal Hypoxic-Ischemic Brain Injury: Mechanisms, Pathogenesis, and Potential Therapeutic Strategies. *Frontiers in Cellular Neuroscience*. 2022 Dec 13;16:1086692.
6. Liam M. Koehn, Kevin Nguyen, **Xiaodi Chen**, Andre Santoso, Richard Tucker, Yow-Pin Lim, Barbara S. Stonestreet. Effects of three different doses of Inter-alpha Inhibitor Proteins on severe hypoxia-ischemia related brain injury in neonatal rats. *International Journal of Molecular Sciences*. 2022 Nov 3;23(21):13473.
7. Kazuki Hatayama, Sydney Riddick, Fares Awa, **Xiaodi Chen**, and Barbara S. Stonestreet. Time Course of Changes in the Neurovascular Unit after Hypoxic-Ischemic Injury in Neonatal Rats. *International Journal of Molecular Sciences*, 2022 Apr 10;23(8):4180.
8. **Xiaodi Chen**,\* Jiyong Zhang,\* Edward G. Walsh, Yuqi Wu, Rose Domonoske, Adriel Barrios - Anderson, Richard Tucker, Grayson L. Baird, Yow-Pin Lim, Kevin Bath, and Barbara S. Stonestreet. Short- and Long-Term Neuroprotective Effects of Inter-alpha Inhibitor Proteins in a Neonatal Rat Model of Hypoxic-Ischemic Brain Injury. *Neurotherapeutics*. 2022 Mar;19(2):528-549. **\*Equal senior author contributions.**
9. Kazuki Hatayama, Boram Kim, **Xiaodi Chen**, Yow-Pin Lim, Joanne O. Davidson, Laura Bennet, Alistair J. Gunn, and Barbara S. Stonestreet. Changes in cellular localization of inter-alpha inhibitor proteins after cerebral ischemia in the near-term ovine fetus. *International Journal of Molecular Sciences*. 2021 Oct 4;22(19):10751.
10. Kazuki Hatayama, Ray H Chen, Jordan Hanson, Kiyoshi Teshigawara, Joseph Qiu, Andre Santoso, Clémence Disdier, Sakura Nakada, **Xiaodi Chen**, Masahiro Nishibori, Yow-Pin Lim,\* and Barbara S. Stonestreet.\* High Mobility Group Box-1 and Inter-alpha Inhibitor Proteins: In vitro binding and co-localization in cerebral cortex after hypoxic-ischemic injury. *The FASEB Journal*. 2021 Mar;35(3):e21399. **\*Equal senior author contributions.**
11. Liam M. Koehn, **Xiaodi Chen**, Aric F. Logsdon, Yow-Pin Lim, and Barbara S. Stonestreet, Novel Neuroprotective Agents to Treat Neonatal Hypoxic-Ischemic Encephalopathy: Inter-Alpha Inhibitor Proteins. *International Journal of Molecular Sciences*. 2020, 21(23), 9193.
12. **Xiaodi Chen**. Potential neuroinvasive and neurotrophic properties of SARS-CoV-2 in pediatric patients: Comparison of SARS-CoV-2 with non-segmented RNA viruses. *Journal of NeuroVirology*. 2020 Oct 14;1-12. Online ahead of print.
13. Stephanie Schuffels, Sakura Nakada, Yuqi Wu, Yow-Pin Lim, **Xiaodi Chen**,\* and Barbara S. Stonestreet\*. Neuroprotective effects of inter-alpha inhibitor proteins after exposure of neonatal rats to severe hypoxia-ischemia. *Experimental Neurology*. 2020 Sep 5;334:113442. [Epub ahead of print]. **\*Equal senior author contributions.**
14. Clémence Disdier, Fares Awa, **Xiaodi Chen**, Simerdeep Dhillon, Robert Galinsky, Joanne O. David-

- son, Christopher A. Lear, Laura Bennet, Alistair J. Gunn, Barbara S. Stonestreet. Lipopolysaccharide-induced changes in the neurovascular unit. *Journal of Neuroinflammation*. 2020 May 28;17(1):167.
15. Boram Kim, Suzanne DeLaMonte, Virginia Hovanesian, Aparna Patra, **Xiaodi Chen**, Ray Chen, Miles Miller, Halit M. Pinar, Yow-Pin Lim, Edward Stopa, Barbara Stonestreet. Ontogeny of Inter-Alpha Inhibitor Protein (IAIP) Expression in Human Brain. *Journal of Neuroscience Research*. 2020 May; 98(5):869-887.
  16. Aric F. Logsdon, Michelle A. Erickson, **Xiaodi Chen**, Joseph Qiu, Yow-Pin Lim, Barbara S. Stonestreet, William A. Banks. Inter-alpha protein inhibitors attenuate lipopolysaccharide-induced blood-brain barrier disruption and downregulate circulating interleukin 6 in mice. *Journal of Cerebral Blood Flow & Metabolism*. 2020 May;40(5):1090-1102.
  17. **Xiaodi Chen**,\* Dawei Song,\* Sakura Nakada, Joseph Qiu, Karin Iwamoto, Ray H Chen, Yow-Pin Lim, William J. Jusko, and Barbara S. Stonestreet. Pharmacokinetics of Inter-Alpha Inhibitor Proteins and Effects on Hemostasis after Hypoxic-Ischemic Brain Injury in Neonatal Rats. *Curr Pharm Des*. 2020 Apr 21. [Epub ahead of print] **\*Equal first author contributions**.
  18. Suzanne M. de la Monte, Gina M. Gallucci, Amy Lin, Ming Tong, Emine B. Yalcin, **Xiaodi Chen**, and Barbara S. Stonestreet. Critical Shifts in Cerebral White Matter Lipid Profiles After Ischemic-Reperfusion Brain Injury in Fetal Sheep as Demonstrated by Positive Ion Mode MALDI-Mass Spectrometry. *Cell Medicine*. 2020 Feb; 12:1–12.
  19. Adriel Barrios-Anderson, **Xiaodi Chen**, Sakura Nakada, Ray Chen, Yow-Pin Lim, and Barbara S Stonestreet. Inter-alpha Inhibitor Proteins Modulate Neuroinflammatory Biomarkers after Hypoxia-Ischemia in Neonatal Rats. *Journal of Neuropathology & Experimental Neurology*, 2019 May 29, [Epub ahead of print].
  20. **Xiaodi Chen**,\* Sakura Nakada,\* John E. Donahue, Richard Tucker, Joseph Qiu, Yow-Pin Lim, Edward G. Stopa, Barbara S. Stonestreet. Neuroprotective effects of Inter-alpha Inhibitor Proteins after hypoxic-ischemic brain injury in neonatal rats. *Experimental Neurology*, 2019 Jul;317:244-259. **\*Equal first author contributions**.
  21. Gina M. Gallucci, Ming Tong, **Xiaodi Chen**, Barbara S. Stonestreet, and Suzanne M. de la Monte. Rapid Alterations in Cerebral White Matter Lipid Profiles After Ischemic-Reperfusion Brain Injury in Fetal Sheep as Demonstrated by MALDI-Mass Spectrometry. *Pediatric and Developmental Pathology*, 2019 Jul-Aug;22(4):344-355. Epub 2019 Jan 25.
  22. **Xiaodi Chen**,\* Jiyong Zhang,\* Boram Kim, Siddhant Jaitpal, Steven S. Meng, Kwame Adjepong, Sayumi Imamura, Hidenori Wake, Masahiro Nishibori, Edward G Stopa, and Barbara S. Stonestreet. High-Mobility Group Box-1 Translocation and Release after Hypoxic Ischemic Brain Injury in Neonatal Rats. *Experimental Neurology*, 2019 Jan;311:1-14. **\*Equal first author contributions**.
  23. **Xiaodi Chen**, Aparna Patra, Grazyna B Sadowska, and Barbara S. Stonestreet. Ischemic-Reperfusion Injury Increases Matrix Metalloproteinases and Tissue Metalloproteinase Inhibitors in Fetal Sheep Brain. *Developmental Neuroscience*, 2018 Jul 26:1-12.
  24. Clemence Disdier, **Xiaodi Chen**, Jeong-Eun Kim, Steven W. Threlkeld, Barbara S. Stonestreet. Anti-cytokine therapy to attenuate ischemic-reperfusion related brain injury in the perinatal period. *Brain Sciences*, 2018 Jun 7;8(6).
  25. **Xiaodi Chen**, Virginia Hovanesian, Syed S Naqvi, Yow-Pin Lim, Richard Tucker, John E Donahue, Edward G Stopa, and Barbara S. Stonestreet. Systemic infusions of anti-interleukin-1 $\beta$  neutralizing antibodies reduce short-term brain injury after cerebral ischemia in the ovine fetus. *Brain Behavior and Immunity*, 2018 Jan;67:24-35.
  26. Aparna Patra, **Xiaodi Chen**, Grazyna B Sadowska, Jiyong Zhang, Yow-Pin Lim, James F Padbury, William A Banks, and Barbara S. Stonestreet. Neutralizing Anti-Interleukin-1 $\beta$  Antibodies Reduce Ischemia-related Interleukin-1 $\beta$  Transport across the Blood-Brain Barrier in Fetal Sheep. *Neuroscience*, 2017 Mar 27.
  27. Mariya S. Spasova, **Xiaodi Chen**, Grazyna B Sadowska, Edward R. Horton, Yow-Pin Lim, and

- Barbara S. Stonestreet. Ischemia Reduces Inter-Alpha Inhibitor Proteins in the Brain of the Ovine Fetus. *Developmental Neurobiology*, 2017 Jun;77(6):726-737.
28. **Xiaodi Chen**, Leah Rivard, Syed Naqvi, Sakura Nakada, James F. Padbury, Juan Sanchez-Esteban, Edward G. Stopa, Yow-Pin Lim, Barbara S. Stonestreet. Expression and localization of Inter-alpha Inhibitors in rodent brain. *Neuroscience*, 2016 Jun 2;324:69-81.
  29. Xuesong Chen, YingJiang, Zheping Huang, Dandan Li, **Xiaodi Chen**, Mengru Cao, Qingwei Meng, Hui Pang, Lichun Sun, Yanbin Zhao, Li Cai. miRNA-378 reverses chemoresistance to cisplatin in lung adenocarcinoma cells by targeting secreted clusterin. *Scientific Reports*, 2016 Jan 19;6:19455.
  30. Grazyna B. Sadowska, **Xiaodi Chen**, Jiyong Zhang, Yow-Pin Lim, Erin E. Cummings, Oleksandr Makeyev, Walter G. Besio, John Gaitanis, James F. Padbury, William A. Banks, Barbara S. Stonestreet. Interleukin-1 $\beta$  transfer across the blood-brain barrier in the ovine fetus. *Journal of Cerebral Blood Flow & Metabolism*, Sep;35(9):1388-95, 2015.
    - Selected as the **featured article**.
    - Selected as the **Cover Page** (illustrated by **Xiaodi Chen**).
  31. Grazyna B. Sadowska, Nigar Ahmedli, **Xiaodi Chen**, Barbara S. Stonestreet. Ontogeny of Tight Junction Protein Expression in the Ovine Cerebral Cortex during Development. *Neuroscience*, 2015 Dec 3;310:422-9.
  32. **Xiaodi Chen**, Grazyna B. Sadowska, Jiyong Zhang, Jeong-Eun Kim, Erin E Cummings, Courtney A. Bodge, Yow-Pin Lim, Oleksandr Makeyev, Walter G. Besio, John Gaitanis, Steven W. Threlkeld, William A. Banks, Barbara S. Stonestreet. Neutralizing Anti-Interleukin-1 $\beta$  Antibodies Modulate Fetal Blood-Brain Barrier Function after Ischemia. *Neurobiology of Disease*, 73: 118-129, 2015.
  33. Jiyong Zhang, Grazyna B. Sadowska, **Xiaodi Chen**, Seon Yeong Park, Jeong-Eun Kim, Courtney A. Bodge, Erin E. Cummings, Yow-Pin Lim, Oleksandr Makeyev, Walter G. Besio, John Gaitanis, William A. Banks, Barbara S. Stonestreet. Anti-Interleukin-6 Neutralizing Antibody Modulates Blood-Brain Barrier Function in the Ovine Fetus. *The FASEB Journal*. May;29(5):1739-53, 2015.
  34. Susan S. Cohen, May Min, Erin E. Cummings, **Xiaodi Chen**, Grazyna B. Sadowska, Surendra S. Sharma, Barbara S. Stonestreet. Effects of Interleukin-6 on the Expression of Tight Junction Proteins in Isolated Cerebral Microvessels from Yearling and Adult Sheep. *Neuroimmunomodulation*, 20(5):264-73. 2013.
  35. **Xiaodi Chen**, Steven W. Threlkeld, Erin E. Cummings, Ilona Juan, Oleksandr Makeyev, Walter G. Besio, John Gaitanis, William A. Banks, Grazyna B. Sadowska, Barbara S. Stonestreet. Ischemia-reperfusion impairs blood-brain barrier function and alters tight junction protein expression in the ovine fetus. *Neuroscience*, 226: 89-100, 2012.
  36. **Xiaodi Chen**, Steven W. Threlkeld, Erin E. Cummings, Surendra Sharma, and Barbara S. Stonestreet. *In-vitro* Validation of Cytokine Neutralizing Antibodies by testing with Ovine Mononuclear Splenocytes. *Journal of Comparative Pathology*, 148: 252-258, 2013.
  37. Joris Vriens, Grzegorz Owsianik, Thomas Hofmann, Stephan E. Philipp, Julia Stab, **Xiaodi Chen**, Melissa Benoit, Fenqin Xue, Annelies Janssens, Sara Kerselaers, Johannes Oberwinkler, Rudi Vennekens, Thomas Gudermann, Bernd Nilius, and Thomas Voets. TRPM3 Is a Nociceptor Channel Involved in the Detection of Noxious Heat. *Neuron*, Volume(70), Issue(3), 482-494, 2011.
    - Ranked as **TOP25 Hottest Articles** from April to June 2011, within the journal of **Neuron** (ScienceDirect).
  38. Thomas Hofmann, Vladimir Chubanov, **Xiaodi Chen**, Anna S. Dietz, Thomas Gudermann, Craig Montell. *Drosophila* TRPM channel is essential for the control of extracellular magnesium levels. *PLoS ONE*. 5(5):e10519, 2010.

#### Other Peer-Reviewed Publications:

1. Ayman Abou Mehrem, Essa Al Awad, Kim Anninck, Stephanie Au-Young, Nesil Aydinol, Peter Bartmann, Manon Benders, Amina Benlamri, Leah Bolderheij, Yalcin Celik, Natalie Chan, Cecil Chau, Vann Chau, **Xiaodi Chen**, Claudia Chetcuti Ganado, Annaleen Coetser, Filip Cools, Giselle Da

Rocha, Hans-Peter Deigner, Anneleen Dereymaeker, Laxmikant Deshmukh, Rose Domonoske, Salma Dossani, Jeanne M Dsouza, Mayy El Gamal, Peace Eshemokhai, Michael Esser, Elsa Fiedrich, Axel Franz, Anirban Ghosh, Floris Groenendaal, Ruth E Grunau, Sujith Kumar Reddy Gurram Venkata, Serif Hamitoglu, Lena Hellström-Westas, Leigh Irvine, Katrien Jansen, Artem Javadyan, Graham Jenkin, Noela Kamanga, Navneet Kaur, Elif Keles, Matthias Keller, Edmond Kelly, Samantha Jane Kesting, Dikeledi Kgwadi, Boram Kim, Matthias Kohl, Derek Kowal, Jennifer Damoi Kricitober, Lara Leijser, Mark LePine, Yow-Pin Lim, Abhay Lodha, Atul Londhe, Linh Ly, Eva Maes, Atul Malhotra, Neil Marlow, Joseph L Mathew, Courtney McDonald, Mia McLean, Cathy Metcalfe, Ron Meyer, Steven P Miller, Suzanne Miller, Tshiamo Mogajane, Khorshid Mohammad, Sarfaraz Momin, John Montpetit, Nelson Mukiza, Prashanth Murthy, James N Scott, Victoria Nakibuuka, Firdose Nakwa, Gunnar Naulaers, Jennessa Noort, Nandi Ntuli, Claude Ondongo-Ezhet, Renee Paul, Michael Pepper, Achim Plum, Bryan Rombough, Ola Saugstad, Jillian Scotland, James Scott, Karabo Seake, Robert Sebunya, Thiviya Selvanathan, Letlhogonolo Sepeng, Huseyin Simsek, Carola Steins-Rang, Barbara Stonestreet, Selphee Tang, Erdal Taskin, Liesbeth Thewissen, Sumesh Thomas, Reenu Thomas, Alison van Kwawegen, Jeanne van Rensburg, Sithembiso Velaphi, Yuqi Wu, Akan Yaman, Hacer Yapicioglu-Yildizdas, Tamara Yawno, Pearl Zaki, Hussein Zein, Lindsay Zhou, Proceedings of the 13th International Newborn Brain Conference: Neuroprotection strategies in the neonate. *J Neonatal Perinatal Med.* 2022;15(2):427-439

2. **Xiaodi Chen**, Vladimir Chubanov, Thomas Gudermann, Thomas Hofmann. Functional properties of TRPM3. Sequence-verified full length mouse TRPM3 cDNAs; submitted to non-redundant division of GenBank®. Accession number JF706722; released May 2011.
3. **Xiaodi Chen**, Localization and functional analysis of the calcium permeable melastatin-like channel TRPM3. Published dissertation. *German National Library and Marburg University Library*, 2009.

#### Publications Submitted or in Preparation:

1. Treatment with Inter-Alpha Inhibitor Proteins modulates endothelial vascular components at the blood-brain barrier and cytokines after hypoxia-ischemia in neonatal rats. Liam M. Koehn, Kevin Nguyen, Richard Tucker, Yow-Pin Lim, **Xiaodi Chen**, and Barbara S. Stonestreet. *Neurotherapeutics*. November, 2023 (Submitted)

#### Abstracts Accepted in Journals:

1. **Xiaodi Chen**, Grazyna B. Sadowska, Jiyong Zhang, Erin E. Cummings, Edward G. Stopa, and Barbara S. Stonestreet. Effect of blocking interleukin-1 $\beta$  with neutralizing antibody on tight junction protein expression after brain ischemia in ovine fetus. *The FASEB Journal*. March 29, 2012;26:707.2.
2. Grazyna B. Sadowska, **Xiaodi Chen**, Jiyong Zhang, Erin E. Cummings, James F. Padbury, William A. Banks, and Barbara S. Stonestreet. Ischemia accentuates the transfer of interleukin-1 $\beta$  across the blood-brain barrier in the ovine fetus. *The FASEB Journal*. March 29, 2012;26:707.1.
3. Thomas Hofmann, Anna S. Dietz, **Xiaodi Chen**, Vladimir Chubanov, Thomas Gudermann, Craig Montell. Hypermagnesemia due to Malpighian tubule failure in trpm mutant *Drosophila* larvae. *NAUNYN-SCHMIEDEBERGS ARCHIVES OF PHARMACOLOGY*. 381:31, 2010.
4. Chubanov V., Storch U., **Chen X.**, Schnitzler M.Y., Hofmann T., Gudermann T. Phenotypical divergence between mice and humans carrying loss-of-function alleles of TRPM6. *NAUNYN – SCHMIEDE-BERGS ARCHIVES OF PHARMACOLOGY*. 379:32, 2009.

#### Conference Abstract/Oral or Poster Presentations:

1. Adeline Allen, Christian Munoz, Bryce Jacobs, Paolo Migani, Barbara S. Stonestreet, John Marshall, **Xiaodi Chen**. D-Syn3 Reduced Brain Volume Loss and Affected p-Tau Expression in Neonatal Rats with Exposure to Hypoxic-Ischemic Brain Injury. Pediatric Academic Societies Annual Meeting, May, Toronto, Canada, 2024 (**Platform, Presenting author**).

2. Alix Hamon, Auriane Maïza, Neil Ashe, Amalia Tsintzou, Julia Villani, Christian Munoz, Barbara S. Stonestreet, Aloïse Mabondzo, and **Xiaodi Chen**. Beneficial effects of purine derivative drugs to treat severe hypoxic-ischemic brain injury in neonatal rats: Efficacy of intraperitoneal versus nose to brain drug delivery. Pediatric Academic Societies Annual Meeting, May, Toronto, Canada, 2024.
3. Kazuki Hatayama, **Xiaodi Chen**, Joseph Qiu, Andre Santoso, B.S. Barbara S. Stonestreet, Nicholas DaSilva, and Yow-Pin Lim. Identification of Binding Partners of Inter-alpha Inhibitor Proteins in Human Umbilical Vein Endothelial Cells. Pediatric Academic Societies Annual Meeting, May, Toronto, Canada, 2024.
4. Lynn Bitar, Barbara S. Stonestreet, Yow-Pin Lim, **Xiaodi Chen**, Yu-Lun Liu, Lina Chalak. Reductions in inter-alpha inhibitor cord blood concentrations in infants with hypoxic-ischemic encephalopathy: Potential biomarkers of neonatal brain health. Pediatric Academic Societies Annual Meeting, May, Toronto, Canada, 2024.
5. Brynn Kroke, Mark Appleman, Tuong Tran, **Xiaodi Chen**, Barbara Stonestreet, John Marshall. Syn3 attenuates hypoxic-ischemic brain injury in neonatal rats. Pediatric Academic Societies Annual Meeting, April, Washington, D.C., USA, 2023.
6. Aloïse Mabondzo, Auriane Maïza, **Xiaodi Chen**, Syam Nair, Henrik Hagberg, and Barbara Stonestreet. Modulation of Blood-Brain Barrier Dysfunction following Hypoxia Ischemia to Prevent Neuronal Impairment. Brain Barriers, Cold Spring Harbor Laboratory Conference. March, Cold Spring Harbor, NY, USA, 2023.
7. Auriane Maïza, **Xiaodi Chen**, Clémence Disdier, Liam Koehn, Kazuki Hatayama, Anne-Cécile Guyot, Aloïse Mabondzo, and Barbara Stonestreet. Purine Derivative Drugs: Innovative neuroprotective strategies to treat hypoxia-ischemia related neonatal brain injury. Pediatric Academic Societies Annual Meeting, April, Denver, CO, USA, 2022. (**Platform, Presenting author**)
8. Katie Gu, Saira Moazzam, Yow-Pin Lim, Barbara S Stonestreet, and **Xiaodi Chen**. Increased molecular interactions between IAIPs and HMGB1 in the neonatal brain after exposure to hypoxic-ischemic injury. Pediatric Academic Societies Annual Meeting, April, Denver, CO, USA, 2022.
9. Kazuki Hatayama, Sydney Riddick, Fares Awa, **Xiaodi Chen**, Yow-Pin Lim, Barbara S. Stonestreet. Time course of changes in the Neurovascular Unit after hypoxic-ischemic injury in neonatal rats. Pediatric Academic Societies Annual Meeting, April, Denver, CO, USA, 2022.
10. Kazuki Hatayama, **Xiaodi Chen**, Yow-Pin Lim, Barbara S. Stonestreet. Exogenous Inter-alpha inhibitor proteins (IAIPs) Enter Human Umbilical Vein Endothelial Cells (HUVEC) and Co-Localize with Cytoplasmic Elements. Pediatric Academic Societies Annual Meeting, April, Denver, CO, USA, 2022.
11. Liam M. Koehn, Kevin Nguyen, **Xiaodi Chen**, Richard Tucker, Yow-Pin Lim, Barbara S. Stonestreet. Dose-response of inter-alpha inhibitor protein treatment after neonatal hypoxic-ischemic brain injury. Pediatric Academic Societies Annual Meeting, April, Denver, CO, USA, 2022.
12. Liam M. Koehn, **Xiaodi Chen**, Richard Tucker, Yow-Pin Lim, Barbara S. Stonestreet. Cytokine concentrations in brain and blood after exposure of neonatal rats to hypoxia-ischemia along with treatment with inter-alpha inhibitor proteins. Pediatric Academic Societies Annual Meeting, April, Denver, CO, USA, 2022.
13. **Xiaodi Chen**, Yuqi Wu, Boram Kim, Rose Domonoske, Yow-Pin Lim, Barbara S. Stonestreet. Effects of combined treatment of Inter-Alpha Inhibitor Proteins (IAIPs) with hypothermia in neonatal rats exposed with hypoxic-ischemic (HI) brain injury. International Newborn Brain Conference. February, Clearwater Beach, FL, USA, 2022.
14. **Xiaodi Chen**, Emine Yalcin, Gina Gallucci, Ming Tong, Barbara S. Stonestreet, Suzanne M de la Monte. Treatment with Inter-alpha Inhibitor Protein attenuates alterations in cerebral white matter lipid profiles demonstrated by MALDI-Mass Spectrometry after ischemic brain injury in fetal sheep. Pediatric Academic Societies Annual Meeting, May, Philadelphia, PA, USA, 2020.
15. **Xiaodi Chen**, Yow-Pin Lim, and Barbara S. Stonestreet. Systemic treatment with Inter-alpha Inhibitor Proteins reduces HMGB1 concentrations after exposure to hypoxic-ischemic injury in the

- brain of neonatal rats. Pediatric Academic Societies Annual Meeting, May, Philadelphia, PA, USA, 2020.
16. Boram Kim, Kazuki Hatayama, **Xiaodi Chen**, Yow-Pin Lim, Joanne O Davidson, Laura Bennet, Alistair J Gunn, and Barbara S Stonestreet. Cerebral ischemia modifies the cellular localization of Inter-Alpha Inhibitor Proteins in neurons but not glia or proliferating cells in fetal sheep. Pediatric Academic Societies Annual Meeting, May, Philadelphia, PA, USA, 2020.
  17. **Xiaodi Chen**, Sakura Nakada, Yow-Pin Lim, and Barbara S Stonestreet. Cytokine responses in serum and brain after treatment with inter-alpha inhibitor proteins in neonatal rats with hypoxic-ischemic brain injury. Pediatric Academic Societies Annual Meeting, April, Baltimore, MD, USA, 2019.
  18. Boram Kim, **Xiaodi Chen**, Yow-Pin Lim; Joanne O. Davidson, Laura Bennet Laura, Alistair J. Gunnr J., Barbara S. Stonestreet. Ischemia alters the subcellular localization of Inter-Alpha Inhibitor Proteins in the ovine fetal brain. Pediatric Academic Societies Annual Meeting, April, Baltimore, MD, USA, 2019. (Platform)
  19. Sakura Nakada, **Xiaodi Chen**, Yow-Pin Lim, Ray H Chen, Barbara S Stonestreet. Inter-alpha inhibitor proteins (IAIPs) attenuate oligodendrocyte loss in male neonatal rats with hypoxic-ischemic (HI) brain injury. Pediatric Academic Societies Annual Meeting, April, Baltimore, MD, USA, 2019.
  20. Stephanie Schuffels, **Xiaodi Chen**, Ray H. Chen, Sakura Nakada, Yow-Pin Lim; Barbara S. Stonestreet. Inter-Alpha Inhibitor Proteins (IAIPs) attenuate hypoxic-ischemic brain injury in male and female neonatal rats. Pediatric Academic Societies Annual Meeting, April, Baltimore, MD, USA, 2019. (Platform)
  21. Ray Chen, Kiyoshi Teshigawara, Joseph Qiu, Andre Santoso, Clemence Disdier, Sakura Nakada, **Xiaodi Chen**, Masahiro Nishibori, Barbara S Stonestreet, Yow-Pin Lim. Inter-Alpha Inhibitor Proteins (IAIPs) bind to the ubiquitous high mobility group box-1 (HMGB1) nuclear proteins. Pediatric Academic Societies Annual Meeting, April, Baltimore, MD, USA, 2019.
  22. Sakura Nakada, Adriel Barrios-Anderson, Karin Iwamoto, Ray H Chen, Sean Pazurchek, Wendy E Gonzalez, Yow-Pin Lim, Barbara S Stonestreet, **Xiaodi Chen**. Effects of inter-alpha inhibitor proteins (IAIPs) on complete blood count and bleeding time in neonatal rats with hypoxic-ischemic(HI) brain injury. *Pediatric Academic Societies Annual Meeting*, May, Toronto, Canada, 2018. (Platform)
  23. Boram Kim, **Xiaodi Chen**, Yow-Pin Lim, Barbara S. Stonestreet. Hypoxia-Ischemia Reduces Neuronal Inter-Alpha Inhibitor Protein Expression in the Brain of the Ovine Fetus. *Pediatric Academic Societies Annual Meeting*, May, Toronto, Canada, 2018.
  24. Boram Kim, Suzanne M. de la Monte, Lelia Noble, Virginia Hovanesian, Aparna Patra, **Xiaodi Chen**, Ray H. Chen, Miles C Miller, Edward G Stopa, M. Halit Pinar, , Yow-Pin Lim, Barbara S. Stonestreet. Ontogeny of Inter-Alpha Inhibitor Proteins (IAIPs) in Human Brain. *Pediatric Academic Societies Annual Meeting*, May, Toronto, Canada, 2018.
  25. Gina Gallucci, Ming Tong, **Xiaodi Chen**, Gina Vimbela, Barbara S Stonestreet, Suzanne De La Monte. Rapid Alterations in Cerebral White Matter Lipid Profiles after Ischemic-Reperfusion Brain Injury in Fetal Sheep Demonstrated by MALDI-Mass Spectrometry. *Pediatric Academic Societies Annual Meeting*, May, Toronto, Canada, 2018.
  26. Adriel Barrios-Anderson, **Xiaodi Chen**, Sakura Nakada, Ray Chen, Yow-Pin Lim, Barbara S Stonestreet. Inter-Alpha Inhibitor Proteins (IAIPs) Reduce Neutrophilic Infiltration into Brain and Relative Increases in Systemic Neutrophils in Neonatal Rats after Hypoxic-Ischemic (HI) Brain Injury. Brain Injury Across the Age Spectrum: Improving Outcomes for Children and Adults. *NAB/IS*. March, Houston, TX, 2018.
  27. Adriel Barrios-Anderson, **Xiaodi Chen**, Sakura Nakada, Ray Chen, Yow-Pin Lim, Barbara S Stonestreet. Inter-Alpha Inhibitor Proteins (IAIPs) Reduce Neutrophilic Infiltration into Brain and Relative Increases in Systemic Neutrophils in Neonatal Rats after Hypoxic-Ischemic (HI) Brain Injury. *Eastern Society for Pediatrics*, March, 2018 (Poster Presentation) and *New England Perinatal Society*. March, Newport, RI. 2018. (Platform)

28. **Xiaodi Chen**, Jiyong Zhang, Kevin Bath, Yow-Pin Lim, Adriel Barrios-Anderson, Richard Tucker, Grayson L. Baird, Edward G. Walsh, Barbara S. Stonestreet. Inter-alpha inhibitor proteins (IAIPs) attenuate hypoxic ischemic (HI) brain injury determined by MRI in female and behavioral outcomes in male and female neonatal rats. *Pediatric Academic Societies Annual Meeting*, May, San Francisco, CA, USA, 2017.
29. **Xiaodi Chen**, Dawei Song, Joseph Qiu, Rui H. Chen, Yow-Pin Lim, William J. Jusko, and Barbara S Stonestreet. Sex-related pharmacokinetics (PK) of inter-alpha inhibitor (IAIPs) proteins after hypoxia-ischemia (HI) in neonatal rats. *Pediatric Academic Societies Annual Meeting*, May, San Francisco, CA, USA, 2017.
30. Adriel Barrios-Anderson, **Xiaodi Chen**, Rui H. Chen, Yow-Pin Lim, Barbara S. Stonestreet. Anti-Inflammatory Effects of Inter-Alpha Inhibitor Proteins (IAIPs) after Hypoxic-Ischemic (HI) Brain Injury in Neonatal Rats. *Pediatric Academic Societies Annual Meeting*, May, San Francisco, CA, USA, 2017.
31. Sakura Nakada, **Xiaodi Chen**, Yow-Pin Lim, Richard Tucker, Barbara S. Stonestreet. Inter-Alpha Inhibitor Proteins Attenuate Apoptosis in the Brains of Hypoxic-Ischemic Neonatal Rats. *Pediatric Academic Societies Annual Meeting*, May, San Francisco, CA, USA, 2017.
32. Adriel Barrios-Anderson, **Xiaodi Chen**, Syed S Naqvi, Yow-Pin Lim, Barbara S Stonestreet. Inter-alpha Inhibitor Proteins Reduce the Quantity of Microglia in the Hippocampus After Hypoxic-ischemic Brain Injury in the Neonate. *International Stroke Conference*, February, Houston, TX, USA, 2017.
33. Adriel Barrios-Anderson, **Xiaodi Chen**, Yow-Pin Lim, Barbara S Stonestreet. Inter-Alpha Inhibitor Proteins Reduce the Presence of Neutrophils and Matrix Metalloproteinase-9 Positive Neutrophils in Damaged Brain Regions of Neonates with Hypoxic-Ischemic (HI) Brain Injury. *International Stroke Conference*, February, Houston, TX, USA, 2017.
34. Sakura Nakada, **Xiaodi Chen**, Yow-Pin Lim, Richard Tucker, Barbara S. Stonestreet. The Effects of Immediate Treatment with Inter-Alpha Inhibitor Proteins on Apoptosis in Neonatal Rats Exposed to Hypoxic-Ischemic Injury. *International Stroke Conference*, February, Houston, TX, USA, 2017.
35. **Xiaodi Chen**, Virginia Hovanesian, Syed S Naqvi, Grazyna B Sadowska, Jiyong Zhang, John E Donahue, Edward G Stopa, Yow-Pin Lim, and Barbara S. Stonestreet. Systemic Infusions of Anti-Interleukin-1 beta (IL-1 $\beta$ ) Neutralizing Antibodies (mAb) Reduce Ischemia-Reperfusion Injury in Ovine Fetal Brain. *Gordon Research Conference, Barriers of the CNS*, June, New London, NH, USA, 2016.
36. **Xiaodi Chen**, Andre Santoso, Joseph Qiu, Adriel Barrios-Anderson, Sakura Nakada, Yow-Pin Lim, and Barbara S Stonestreet. Systematic Injections of Human Inter-Alpha Inhibitor Proteins (IAIPs) Attenuate Hypoxia-Ischemia Related Increases in Endogenous Brain IAIPs Levels. *Pediatric Academic Societies Annual Meeting*, May, Baltimore, MD, USA, 2016.
37. **Xiaodi Chen**, John E Donahue, Edward G Stopa, Yow-Pin Lim, and Barbara S Stonestreet. Delayed Treatment with Inter-Alpha Inhibitor Proteins (IAIPs) is Neuroprotective after Hypoxic-Ischemic (HI) Brain Injury in Male Neonatal Rats. *Pediatric Academic Societies Annual Meeting*, May, Baltimore, MD, USA, 2016.
38. **Xiaodi Chen**, Syed Naqvi, Steven Meng, Grazyna B. Sadowska, Jiyong Zhang, John E. Donahue, Edward G. Stopa, Joseph Qiu, Yow-Pin Lim, and Barbara S. Stonestreet. Neuroprotective Effects of Inter-Alpha Inhibitor Proteins after Hypoxic-Ischemic Brain Injury in Neonatal Rats. *Pediatric Academic Societies Annual Meeting*, April, San Diego, CA, USA, 2015.
39. **Xiaodi Chen**, Yow-Pin Lim, Grazyna B. Sadowska, Juan Sanchez-Esteban, James F. Padbury, Barbara S. Stonestreet. Expression of Inter-alpha Inhibitor Genes and Proteins in Mouse Cortical Neurons. *Pediatric Academic Societies Annual Meeting*, April, San Diego, CA, USA, 2015.
40. Grazyna B. Sadowska, **Xiaodi Chen**, Jiyong Zhang, and Barbara S. Stonestreet. Ischemia Increases Matrix Metalloproteinases (MMPs) and Tissue Metalloproteinases Inhibitors (TIMPs) in Ovine Fetal Brain. *Pediatric Academic Societies Annual Meeting*, April, San Diego, CA, USA, 2015.

41. Fadime Dincer, Grazyna B Sadowska, **Xiaodi Chen**, and Barbara S. Stonestreet. Ontogeny of Matrix Metalloproteinases (MMPs) and Tissue Inhibitors of Metalloproteinases (TIMPs) in Ovine Brain during Development. *Pediatric Academic Societies Annual Meeting*, April, San Diego, CA, USA, 2015.
42. Aparna Patra, Nicole Noronha, Grazyna B. Sadowska, **Xiaodi Chen**, and Barbara S. Stonestreet. Ontogeny and Effects of Ischemia on Matrix Metal-loproteinase (MMP) in Ovine Fetal Brain. *Pediatric Academic Societies Annual Meeting*, May, Vancouver, Canada, 2014. (SPR Fellow's Basic Research Award)
43. Aparna Patra, Grazyna B. Sadowska, **Xiaodi Chen**, Jiyong Zhang, Yow-Pin Lim, James F. Padbury, William A. Banks, Barbara S. Stonestreet. Anti-cytokine Antibodies Reduced Ischemia-Related Cytokine Transport Across the Fetal Blood-Brain Barrier. *Pediatric Academic Societies Annual Meeting*, May, Vancouver, Canada, 2014.
44. Jiyong Zhang, **Xiaodi Chen**, Grazyna B. Sadowska, Seon-Yeong Park, Barbara S. Stonestreet. Interleukin-6 reduces the expression of tight junction proteins in isolated cerebral microvessels from young and adult sheep. *Pediatric Academic Societies Annual Meeting*, May, Washington, D.C., USA, 2013 (Oral Presentation and Abstract).
45. Jiyong Zhang, Mariya Spasova, Grazyna B. Sadowska, **Xiaodi Chen**, Courtney A. Hill, Jeong-Eun Kim, John E Donahue, Edward G. Stopa, Yow-Pin Lim and Barbara S. Stonestreet. Inter-Alpha Inhibitor Proteins Attenuate Ischemic Brain Damage in the Ovine Fetus. *Pediatric Academic Societies Annual Meeting*, May, Washington, D.C., USA, 2013 (Oral Presentation and Abstract).
46. Sujir Pritha Nayak, Yulian Wang, **Xiaodi Chen**, Barbara S. Stonestreet, and Juan Sanchez-Esteban. TRPV4 Regulates Fetal Lung Development and Injury. *Pediatric Academic Societies Annual Meeting*, May, Washington, D.C., USA, 2013 (Oral Presentation and Abstract).
47. **Xiaodi Chen**, Grazyna B. Sadowska, Jiyong Zhang, Erin E. Cummings, Steven W. Threlkeld, Yow-Pin Lim, William A. Banks, and Barbara S. Stonestreet. Interleukin-1 $\beta$  Neutralizing Antibody Attenuates Blood-Brain Barrier Dysfunction after Ischemia in the Ovine Fetus. *The 10<sup>th</sup> International Conference on Cerebral Vascular Biology*, June, Montreal, Canada, 2013.
48. **Xiaodi Chen**, Grazyna B. Sadowska, Jiyong Zhang, Erin E. Cummings, Edward G. Stopa, William A. Banks, and Barbara S. Stonestreet. The effects of interleukin-1 $\beta$  neutralizing antibody on blood-brain barrier dysfunction after *in-utero* brain ischemia in the ovine fetus. *Gordon Research Conference, Barriers of the CNS*, June, New London, NH, USA, 2012.
49. Mariya Spasova, **Xiaodi Chen**, Grazyna B. Sadowska, Yow-Pin Lim and Barbara S. Stonestreet. Ischemia Reduces Inter-Alpha Inhibitor Proteins in the Brain of the Ovine Fetus. *Pediatric Academic Societies Annual Meeting*, April, Boston, MA, USA, 2012.
50. Jiyong Zhang, Grazyna B. Sadowska, **Xiaodi Chen**, Erin E. Cummings, Steven W. Threlkeld, William A. Banks, and Barbara S. Stonestreet. Effects of anti-interleukin-6 neutralizing antibody on ischemia-related changes in blood-brain barrier permeability in the cerebral cortex of the ovine fetus. *Pediatric Academic Societies Annual Meeting*, April, Boston, MA, USA, 2012.
51. **Xiaodi Chen**, Grazyna B. Sadowska, Erin E. Cummings, Steven W. Threlkeld, Jiyong Zhang, Yow-Pin Lim, Edward G. Stopa, William A. Banks, Barbara S. Stonestreet . Interleukin-1 $\beta$  neutralizing antibodies attenuate ischemia related blood-brain barrier disruption in the ovine fetus. *Society for Neuroscience Annual Meeting*, November, 2011, Washington DC, USA, 2011.
52. **Xiaodi Chen**, Grazyna B. Sadowska, Erin E. Cummings, Steven W. Threlkeld, Edward G. Stopa, Clifford S. Patlak, William A. Banks, and Barbara S. Stonestreet. Blood-brain barrier disruption after in-utero brain ischemia is dependent upon the duration of reperfusion in the ovine fetus. *Pediatric Academic Societies Annual Meeting*, April, Denver, CO, USA, 2011.
53. **Xiaodi Chen**, Grazyna B. Sadowska, Erin Cummings, Steven W. Threlkeld, Edward G. Stopa, William A. Banks, and Barbara S. Stonestreet. Duration of reperfusion after *in-utero* brain ischemia modifies the expression of tight junction (TJ) proteins in the ovine fetus. *Pediatric Academic Societies Annual Meeting*, April, Denver, CO, USA, 2011.

54. Grazyna B. Sadowska, **Xiaodi Chen**, Erin E. Cummings, Steven W. Threlkeld, Edward G. Stopa, Clifford S. Patlak, William A. Banks, and Barbara S. Stonestreet. Decreases in Tight Junction (TJ) Protein Expression Correlate with Ischemia Related Increases in Blood-Brain Barrier (BBB) Permeability in Ovine Fetuses. *Pediatric Academic Societies Annual Meeting*, April, Denver, CO, USA, 2011.
55. Cohen, S.S., Min, M., Cummings, E.E., **Chen, X.**, Sadowska, G., Sharma, S., and Barbara S. Stonestreet. Interleukin-6 reduces the expression of the tight junction protein occludin in isolated cerebral microvessels from young and adult sheep. *Pediatric Academic Societies Annual Meeting*, April, Denver, CO, USA, 2011.

## INVITED TALKS

### International

- |         |   |
|---------|---|
| 05/2024 | <u>Platform</u> , Pediatric Academic Societies, Toronto, Ontario, Canada<br>Title: D-Syn3 Reduced Brain Volume Loss and Affected p-Tau Expression in Neonatal Rats with Exposure to Hypoxic-Ischemic Brain Injury.  |
| 04/2022 | <u>Platform</u> , Pediatric Academic Societies, Denver, CO, USA<br>Title: Purine Derivative Drugs: Innovative neuroprotective strategies to treat hypoxia-ischemia related neonatal brain injury.   |
| 05/2016 | <u>Platform</u> , Pediatric Academic Societies, Baltimore, MD, USA<br>Title: Systemic Infusions of Anti-Interleukin-1 (IL-1 $\beta$ ) Neutralizing Antibodies (mAb) have Neuroprotective Properties in Ovine Fetal Brain.                                   |
| 05/2013 | <u>Platform</u> , Pediatric Academic Societies, Washington, D.C., USA<br>Title: Cerebral Cortical (CC) Uptake of Anti-Interleukin-1(IL-1) Neutralizing Antibody (mAb) and Attenuation of Ischemia-Related Increases in IL-1 and Caspase-3 in Ovine Fetuses. |

### National

- |         |  |
|---------|--|
| 11/2022 | Department of Medicine Research Grand Rounds, University of Toledo College of Medicine & Life Sciences, Toledo, OH, USA<br>Title: Anti-Inflammatory Responses as a Potential Neuroprotective Strategy in Neonatal Hypoxic-Ischemic Brain Injury. |
| 02/2017 | Tufts Medical Center neuroscience grand rounds, Floating Hospital of Children, Boston, MA, USA<br>Title: Hypoxic-Ischemic Brain Injury, Neuroinflammation, and Potential Neuroprotective Strategies.   |

### Local

- |         |  |
|---------|--|
| 11/2021 | Pediatric Research Colloquium, Women & Infants Hospital of RI, USA<br>Title: Inter- $\alpha$ Inhibitor Proteins: A Novel Therapeutic Agent For Treating Hypoxic-Ischemic Brain Injury.   |
| 02/2021 | Pediatric Research Colloquium, Women & Infants Hospital of RI, USA<br>Title: MRI, Histopathological and Behavioral Assessments of the Effects of Inter- $\alpha$ Inhibitor Proteins on Brain Injury After Neonatal Hypoxia-Ischemia in Rats. |

02/2020	Pediatric Research Colloquium, Women & Infants Hospital of RI, USA Title: Human Pluripotent Stem Cells-Derived Brain Microvascular Endothelial Cells: Studying Blood-Brain Barrier in Developing Brain .
01/2019	Pediatric Research Colloquium, Women & Infants Hospital of RI, USA Title: Inflammatory Responses after Inter alpha Inhibitor Protein Treatment in Hypoxic Ischemic Brain Injury.
05/2017	Pediatric Research Colloquium, Women & Infants Hospital of RI, USA Title: Hypoxic-Ischemic Brain Injury, Neuroinflammation, and Potential Neuro-protective Strategies.

## GRANTS

### Ongoing

**R01,  
5R01NS117428**

Role: **Principal Investigator**

Title: Neuroprotective Strategy: Novel Purine Derivatives for Neonatal Hypoxia-ischemia.

Funding Agency: NIH/NINDS

Duration of Award: 04/2021 – 01/2026

**SBIR (Phase  
II-B, R44  
NS084575)**

Role: **Subcontract Principal Investigator**

PI: Dr. Yow-Pin Lim

Title: Inter-alpha Inhibitors in Hypoxic-Ischemic Brain Injury

Funding Agency: NIH/NINDS

Duration of Award: 09/2023 – 08/2026

**R21,  
RNS133544A**

Role: **Multiple Principal Investigator**

PIs: Dr. John Marshall (contact) and Dr. Xiaodi Chen

Title: A novel BDNF potentiator for the treatment of neonatal brain injury

Funding Agency: NIH/NINDS

Duration of Award: 04/2024 – 03/2026

### Pending

**STTR (R41/R42,  
1R41NS135632)**

Role: **Subcontract Principal Investigator**

PI: Dr. John Marshall (contact) and Dr. Barbara Stonestreet

Title: Novel BDNF enhancing therapeutic to treat neonatal brain injury

Funding Agency: NIH

Score: **28**, JIT information requested

### Completed

**R01,  
5R01HD057100**

Role: **Senior Researcher**

PI: Dr. Barbara Stonestreet

Title: Cytokines and the blood-brain barrier in the ovine fetus

Funding Agency: NIH/NICHHD

Duration of Award: 06/2016 – 07/2022

**SBIR, R44  
NS084575**

Role: **Research Consultant**

PI: Dr. Yow-Pin Lim

Title: Inter-alpha Inhibitors in Hypoxic-Ischemic Brain Injury

Funding Agency: NIH-SBIR-Phase II/NINDS

Duration of Award: 06/2018 – 11/2021

<b>R21, 5R21NS095130</b>	<p>Role: <b>Senior Researcher</b></p> <p>Title: Inter-alpha inhibitors: Novel neuroinflammatory modulator of neonatal brain injury</p> <p>PI: Dr. Barbara Stonestreet</p> <p>Funding Agency: NIH/NINDS</p> <p>Duration of Award: 08/2017 – 07/2020</p>
<b>R21, 5R21NS096525</b>	<p>Role: <b>Senior Researcher</b></p> <p>Title: Beneficial Effects of Inter-alpha Inhibitors in Fetal Brain Injury</p> <p>PI: Dr. Barbara Stonestreet</p> <p>Funding Agency: NIH/NINDS</p> <p>Duration of Award: 08/2017 – 07/2020</p>
<b>Oh-Zopfi Pilot Project Grant</b>	<p>Role: <b>Principal Investigator</b></p> <p>Funding Agency: Department of Pediatrics, Women &amp; Infants' Hospital of RI, The Alpert Medical School of Brown University</p> <p>Duration of Award: 07/2019 – 05/2020</p>
<b>Oh-Zopfi Pilot Project Grant</b>	<p>Role: <b>Principal Investigator</b></p> <p>Funding Agency: Department of Pediatrics, Women &amp; Infants' Hospital of RI, The Alpert Medical School of Brown University</p> <p>Duration of Award: 06/2018 – 05/2019</p>
<b>Oh-Zopfi Pilot Project Grant</b>	<p>Role: <b>Principal Investigator</b></p> <p>Funding Agency: Department of Pediatrics, Women &amp; Infants' Hospital of RI, The Alpert Medical School of Brown University</p> <p>Duration of Award: 05/2015 – 04/2016</p>

## PROFESSIONAL TRAINING

### Seminar or Workshop:

08/2016	Practical Workshop in Confocal Microscopy & Quantitative Histology, Chicago, Illinois, USA
09/2019	Derivation of Brain Microvascular Endothelial Cells from Human Pluripotent Stem Cells, Dr. Eric V. Shusta's Laboratory, Madison, Wisconsin, USA

## UNIVERSITY TEACHING, ADVISING AND MENTORING ROLES

07/2016 – present	<p><b>Associate/Assistant Professor</b></p> <p>Department of Pediatrics, Women &amp; Infants Hospital of RI, The Alpert Medical School of Brown University, Providence, RI, USA</p> <ul style="list-style-type: none"> <li>• Oversee the operations of a research laboratory, ensuring its efficient and effective functioning for medical research purposes.</li> <li>• Conduct thorough analysis and interpretation of data, effectively communicating findings to teams involved in the research project.</li> <li>• Actively engage in troubleshooting activities and provide support to colleagues within and outside of the department, offering assistance to resolve any issues that may arise.</li> <li>• Contribute to the development or revision of Standard Operating Procedures (SOPs), working closely with project team leaders to establish well-defined timelines for assay requirements.</li> </ul>
05/2015 – 06/2016	<p><b>Instructor</b></p> <p>Department of Pediatrics, Women &amp; Infants Hospital of RI, The Alpert Medical School of Brown University, Providence, RI, USA.</p>

- Developed comprehensive curriculum and assessments to educate students and fellows on research methodologies and protocols, providing effective guidance and support for their involvement in new research projects.
  - Designed experimental plans to assign tasks and oversee students' involvement in various research processes, ensuring their adherence to established protocols.
  - Actively engaged in the academic community by contributing to scholarly journals through the writing of papers, presenting research findings to professional and academic audiences, and regularly reviewing relevant scholarly literature to maintain up-to-date knowledge in the field.
- 01/2010 – 04/2015 **Post-Doc research associate**  
 Department of Pediatrics, Women & Infants Hospital of RI, The Alpert Medical School of Brown University, Providence, RI, USA.
- Collaborated with the principal investigator in assessing student and clinical fellow assignments, providing support and guidance for their laboratory work.
  - Facilitated discussions with students and fellows to ensure a clear understanding of research project goals and requirements, fostering their comprehension and engagement.
  - Evaluated laboratory results of students and fellows, offering constructive feedback on areas of progress and identifying areas for improvement.
- 01/2010 – present **Mentee Supervision**  
 Department of Pediatrics, Women & Infants Hospital of RI, The Alpert Medical School of Brown University, Providence, RI, USA.
- Undergraduate students: Erin Cumming, May Min, Ilona Juan, Nicole Noronha, Cynthia Susai, Natalie Ring, Christopher Hahn, Karina Manalo, Jason Lee, Nigar Ahmedli, Iris Pak, Steven Meng, Rivard Leah, Syed Naqvi, Wendy Gonzalez, Adriel Barrios-Anderson, Sakura Nakada, Mubarak Momodu, Rose Domonoske, Katie Gu, Jordan Hanson, Fares Awa, Tuong Tran, Saira Moazzam, Kevin Nguyen, Winston Li, , Raphel Awa, Adeline Allen, Julia Villani, Neil Ashe, Brynn Kroke, Melany Veliz, Jane Hwang, Alix Hamon, Bryce Jacobs, Katheryne Gonzalez, Junyue Ma.
  - Master's students: Joyce Sunday, Stephanie Schuffels, Sidney Riddick, Tuong Tran, Christian Munoz, and Josie Chen.
  - Clinic fellows: Susan Cohen, Mariya Spasova, Aparna Patra, Megan Miller, and Sanghamitra Sinha.
  - Visiting scientist: Ray Chen
  - Visiting students: Sayumi Imamura, Miyui Fujieda, and Karin Iwamoto
- 07/1996 – 06/2000 **Teaching and Research Associate**  
 Institute of Anatomy, Shanghai Medical College of Fudan University (Former: Shanghai Medical University), Shanghai, China. (Full time)  
Course name: **human anatomy**
- Managed various teaching responsibilities, including preparing problem sessions, scheduling, and maintaining regular office hours to meet with students.
  - Coordinated teaching observations by arranging for principal investigators to conduct evaluations and proctored examinations.
  - Collaborated with principal investigators to discuss students' grades and completed required grade-related paperwork.
  - Prepared and demonstrated the use of laboratory equipment while enforcing laboratory rules.
  - Taught a full undergraduate-level course on human anatomy.

- Shared teaching responsibilities with professors in a team-teaching setting.
- Led discussions, tutorials, and laboratory sections for undergraduate students.

02/2003 – 04/2006

**Teaching Assistant**

Institute of Medical Sociology and Social Medicine, Philipps University of Marburg, Germany. (Part-time)

Course name: **medical sociology and social medicine**

- Provided support for research projects primarily focused on medical demography.
- Assisted in the preparation, administration, and evaluation of written exams.