Curriculum Vitae – Bo (Peter) Li, PhD

PRESENT POSITION

Bo (Peter) Li, PhD
Assistant Professor
Precision Regenerative Medicine Research Centre (PRMRC)
Macau University of Science and Technology (MUST)
Innovation and Technology Centre (ITC-01)
Tel: +853 6631 6675
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AWARDS AND HONORS

- CIHR-III new investigators forum award (1,600CAD), 2024
- MRC-SCN UK-Canada Exchange Programme Awards (15,000CAD), 2022
- Till & McCulloch Meetings 2022 Travel Award (2,000CAD), 2022
- International Society for Stem Cell Research Meeting Travel Award (900USD), 2019
- Prem Puri Prize for Basic Science Research (2,000EURO), 2018
- Early Career Award from Thrasher Research Fund (26,750USD), 2018
- Restracomp Fellowship from Sickkids Research Institute (67,500CAD), 2018-20
- Exceptional Trainee Award from Sickkids Research Institute (500CAD), 2016
- Trainee Start-up Fund from Sickkids Research Institute (3,000CAD), 2015
- Trainee Travel Award from Sickkids Research Institute (1,000CAD), 2015 & 2016
- Travel Grant to Karolinska Institute, Sweden from the University of Toronto, 2015
- Young Talent Scholar from Shenyang City, China, 2010-2012
- Overseas Research Student Scholar from British Council, 2005-2008

EDUCATION

Ph. D. in Cell and Developmental Biology **2005 – 2015**
University College London, UK, awarded Jan. 2015
Supervisor: Dr. Roberto Mayor

Master of Research in Biomedical Sciences **2004 – 2005**
University of Nottingham, UK
Supervisor: Dr. Peter Wigmore

Bachelor in Bio-pharmaceutical Engineering **2000 – 2004**
Shenyang Pharmaceutical University, China

WORKING EXPERIENCE

Assistant Professor **Jan. 2026 – Present**

Precision Regenerative Medicine Research Centre (PRMRC)

Macau University of Science and Technology (MUST)

- Developmental microenvironment remodeling in neonatal intestinal diseases
- Intestinal stem cell–driven regeneration and epithelial repair in necrotizing enterocolitis (NEC)
- Stromal and vascular niche regulation in neonatal intestinal injury and repair
- Regenerative therapeutic strategies for NEC, including stem cell–based and conditioning approaches
- Organoid and assembloid models for studying intestinal development, disease progression, and regenerative therapies

Research Associate **Mar. 2020 – Mar. 2026**

Research Fellow **Mar. 2014 – Mar. 2020**

Dr. Agostino Pierro lab, Hospital for Sick Children, Canada

- Enteric neural progenitors migration in Hirschsprung's Disease
- Organoids transplantation to reverse intestinal failure
- Intestinal stem cell dynamic during necrotizing enterocolitis (NEC)
- Novel treatments (remote ischemia conditioning, amniotic fluid stem cells, and human milk oligosaccharides) for NEC
- Early maternal separation induced alterations of intestinal epithelial neonatal mice

Visiting Research Scientist **Mar. 2023 – Jul.2023**

Dr. Paolo de Coppi lab, Great Ormond Street Hospital, Institute of Child Health, UCL, UK

- Gastrointestinal tract organoids and iPS-derived cells reprogramming to organoids
- Decellularized organ using an *ex vivo* Bio-reactor platform

Research Assistant **Jul. 2013 – Dec. 2014**

University of Western Ontario, Canada

- The mechanism of congenital heart defects caused by pregestational diabetes

Research Assistant **Jan. 2010 – Mar. 2013**

Liaoning He's Medical University, China

- Stem cell therapy for retinal degenerative diseases using mesenchymal stem cells

TEACHING AND MENTORSHIP

Hospital for Sick Children, Canada

Fellow and Student Mentor **Jan. 2014 – present**

- Teaching 26 Clinical Fellows
- Mentoring 27 undergraduate projects and summer students
- Assisting 8 MS.C. and Ph.D. candidates

Trainee seminar organizer **Sep. 2014 – Jan. 2020**

- Coordinating and overseeing trainee presentations
- 7 laboratories, more than 100 trainees, over 200 talks

Liaoning He's Medical University, China
University Lecturer **Jan. 2009 – Mar. 2013**

- Designed appropriate course curriculums
- Designed innovative methods and course materials
- Lectured General Pharmacy and Cell Biology courses
- Mentored Pharmacy Students in 2010 and 2011

University College London, UK
Teaching Assistant **Sep. 2005 – Jan. 2009**

Lectured Anatomy to Bachelor undergraduate students

- Conducted demonstrations during laboratory sessions

RESEARCH GRANTS

2023 Mar – 2028 Mar **Co- Investigator**. Delivery of nucleic acids using lipid nanoparticles to counteract intestinal injury during necrotizing enterocolitis.
Project Grant. Canadian Institutes of Health Research. PI: Pierro A
$1,016,686CAD. [Grants-ongoing]

2022 Sep – 2027 Sep **Co- Investigator**. Hormonal modulation of the gut-brain axis in necrotizing enterocolitis.
Project Grant. Canadian Institutes of Health Research. PI: Pierro A
$826,200 CAD. [Grants-ongoing]

2018 Jan – 2019 Jan **Principal Applicant**. Human milk oligosaccharides promote intestinal homeostasis in experimental necrotizing enterocolitis.
Thrasher Research Fund. Early Career Award.
$26,750 USD. [Grants- Finished]

2017 Jan – 2019 Jan **Principal Applicant**. Oligosaccharides in necrotizing enterocolitis.
Restracomp Fellowship. The Hospital for Sick Children.
$40,000 CAD. [Grants- Finished]

2017 Mar – 2018 Feb **Co-Investigator**. Malnutrition-induced gut dysfunction treated with milk-derived exosomes:
Proof of concept. Center for Global Child Health. Catalyst Grant.
$25,000 CAD. [Grants-Finished]

2015 Sep – 2017 Sep **Principal Applicant**. Corticotropin-releasing hormone (CRH) prevents gut dysfunction induced by maternal separation.
Trainee Start-up Fund from The Hospital for Sick Children.
$3,000 CAD. [Grants-Finished]

COMMUNITY ENGAGEMENT/SERVICE

Committee Service
2024-Present Laboratory Animal Service Advisory Committee, Sickkids Research Institution

2023-Present SickKids Summer Research (SSuRe) Program Committee, Sickkids Research Institution
2022-2023 Co-Chair of Research Associate Advisory Committee, Sickkids Research Institution

Editor

ECR Editorial Board Member for *The FASEB Journal* (Jan. 2024 to Dec. 2026)

Editorial Board Member of *BMC Gastroenterology*

Guest Editor *Frontier in Pediatrics*

Guest Editor *Metabolites*

Journal Review Activities

European Journal of Pharmacology. Reviewed: 6
Molecular Nutrition & Food Research. Reviewed: 5
npj Biofilms and Microbiomes. Reviewed: 1
Food & Function. Reviewed: 3
Pediatric Surgery International. Reviewed: 9
STAR Protocol. Reviewed: 1
Biomedicine & Pharmacotherapy. Reviewed: 4
Scientific Report. Reviewed: 5
Journal of Experimental Biology. Reviewed: 1
Frontier immunology. Reviewed: 1
Life Sciences. Reviewed: 1
Frontiers in Cell and Developmental Biology. Reviewed: 2
Small method. Reviewed: 1
ACS Biomaterials Science & Engineering. Reviewed: 1

MEMBERSHIP/ASSOCIATIONS

Canadian Association Gastroenterology	2015 – Present
International Society of Stem Cell Research	2015 – Present
Chinese Pharmacological Society	2010 – 2014
Chinese Society for Cell Biology	2009 – 2014
British Society of Cell Biology	2006 – 2009
British Society of Developmental Biology	2005 – 2009

PUBLICATIONS

25 first-author peer-reviewed publications, 9 corresponding-author peer-reviewed publications, and a total of 95 peer-reviewed articles

Full publication list

https://scholar.google.com/citations?user=wf4QLyYAAAAJ&hl=en&authuser=1

Published peer-reviewed manuscripts

2026

1. **Li, B.,** Yeganeh, M., Lee, D., Chusilp, S., Balsamo, F., Ganji, N., Wang, C. Y., Zito, A., Biouss, G. & Pierro, A. Exploring the Complex Pathophysiology of Necrotizing Enterocolitis in Preterm Neonates. **Annual review of pathology** 21, 37-58, doi:10.1146/annurev-pathmechdis-070224-014223 (2026).
2. Huang, Y., Zhang, B., Wu, R. Y., Lee, C., **Li, B.,** Sherman, P., Pierro, A. & Zhu, H. Short-chain fructooligosaccharides protect against intestinal injury in NEC by restoring AKT/GSK-3β signaling. **Journal of pediatric surgery**, 162963, doi:10.1016/j.jpedsurg.2026.162963 (2026).
3. **Li, B*,#,** Xiong, Y*, Zito, A*, Liang, H*, Biouss, G, Balsamo, F, Yeganeh, M, Lee, C, Lee, D, Yang, J, Minich, A, Tahmasian, N, Wang, S, Cadete, M, Tian, Y, Lafreniere, A, Kalish, B, Olguin, P D, Zhu, H#, Pierro, A#. Molecular and Chromatin Accessibility Programs Underlying Epithelial Injury and Impaired Regeneration in Neonatal Necrotizing Enterocolitis. **Cell Mol Gastroenterol Hepatol.** 101730, doi:10.1016/j.jcmgh.2026.101730 (2026).

2025

4. Chusilp, S., Klanrit, P., Lee, C., Lee, D., **Li, B.**, Balsamo, F., Thaiwatcharamas, K., Tanming, P., Aroonsaeng, D., Vejchapipat, P. & Pierro, A. Anti-fibrotic effect of human amniotic fluid stem cells in biliary epithelial-mesenchymal transition of liver ductal organoid. **Stem cells translational medicine** 14, doi:10.1093/stcltm/szaf052 (2025).
5. Shimizu, M., Biouss, G., Yang, J., Fujiwara, N., **Li, B.**, Lee, C., Lee, D., Balsamo, F., Cassaro, F., Yeganeh, M., Zito, A., Hashizume, N., Sugita, K., Miyano, G., Yamataka, A. & Pierro, A. Remote ischemic conditioning modulates the healing process after intestinal anastomosis. **Pediatric surgery international** 42, 16, doi:10.1007/s00383-025-06248-8 (2025).
6. Wang, C. Y., Feizi, M., **Li, B.**, Lee, C., Lee, D., Yang, J., Kang, Y., Bai, Y. Z. & Pierro, A. Ferrostatin-1 protects against necrotizing enterocolitis intestinal injury by inhibiting ferroptosis. **Pediatric surgery international** 42, 26, doi:10.1007/s00383-025-06240-2 (2025).
7. Wu, Y., Ganji, N., Chen, Z., Hu, M., Li, D., **Li, B.**, Huang, Y., Pierro, A. & Zhu, H. Remote ischemic conditioning in necrotizing enterocolitis: an extended phase I safety study. **Pediatric surgery international** 42, 47, doi:10.1007/s00383-025-06238-w (2025).
8. Miyake, H., Hopperton, K. E., Määttänen, P., Koike, Y., Chen, Y., **Li, B.**, Lee, C., Seo, S., Sherman, P. M., Bazinet, R. P. & Pierro, A. Omega-3 polyunsaturated fatty acids and the eicosapentaenoic acid metabolite 18-hydroxyeicosapentaenoic acid (18-HEPE) attenuate experimental necrotizing enterocolitis. **Clinical nutrition** (Edinburgh, Scotland) 55, 66-75, doi:10.1016/j.clnu.2025.09.015 (2025).
9. Zhang, Z., Lee, D., Liu, L., Xiong, Y., Lee, C., Kim, J. E., Chusilp, S., Lau, E., Tian, Y., Feizi, M., Alganabi, M., Lafreniere, A., Cheng, T., Zhou, R., Han, L., Wu, L., Xiao, P., Gao, Y., Benedetti, G., Holland, L.,

Tullie, L., Giobbe, G. G., Li, L., Li, Q., Yamataka, A., Li, V. S. W., De Coppi, P., Jiang, Q.[#], Pierro, A.[#] & **Li, B**[#]. Impairment of stromal-epithelial regenerative cross-talk in Hirschsprung disease primes for the progression to enterocolitis. **Science translational medicine** 17, eadp4679, doi:10.1126/scitranslmed.adp4679 (2025).

#Corresponding author

10. Xiong, Y., Zito, A., Liang, H., Biouss, G., Yang, J., Balsamo, F., Yeganeh, M., Lee, C., Lee, D., Wang, C.-Y., Tahmasian, N., Huang, J., Minich, A., Feizi, M., Wang, S., Tian, Y., De Coppi, P., Kalish, B. T., Olguin, P. D., Zhu, H., Li, B. & Pierro, A. Molecular and Epigenetic Pathways Underlying Epithelial Damage and Repair in Necrotizing Enterocolitis via Multi-omics Approach. **bioRxiv**, 2025.2004.2017.647851, doi:10.1101/2025.04.17.647851 (2025).
11. Biouss, G., Lee, C., Li, B., Adeli, K. & Pierro, A. Glucagon-like peptides agonists promote maturation of intestinal organoids derived from neonates with necrotizing enterocolitis. **Pediatric surgery international** 41, 69, doi:10.1007/s00383-024-05957-w (2025).
12. Cheng, T., Zhang, Z., Zhou, R., Liu, W., Xiao, P., Wu, L., Ma, Y., Niu, W., Chen, Y., Li, B., Pierro, A., Li, L., Jiang, Q. & Li, Q. Clinical Characteristics and Postoperative Functional Outcomes in Children With Mowat-Wilson Syndrome and Hirschsprung's Disease: A Single-center Study. **Journal of pediatric surgery** 60, 162217, doi:10.1016/j.jpedsurg.2025.162217 (2025).
13. Wu, L., Gao, Y., Zhou, R., Xiao, P., Zhang, Z., Li, B., Pierro, A., Li, L., Jiang, Q. & Li, Q. Predictive value of plasma zonulin for postoperative Hirschsprung-associated enterocolitis. **World journal of pediatric surgery** 8, e001057, doi:10.1136/wjps-2025-001057 (2025).
14. Gao, R., Huang, Y., **Li, B.**, Zhang, R., Lee, C., Alganabi, M., Yamoto, M., Peng, X., He, W., Cao, Y., Pierro, A., Shen, C. & Zhu, H. Exosomes derived from colostrum and mature human breast milk protect against experimental necrotizing enterocolitis. **Pediatric surgery international** 41, 218, doi:10.1007/s00383-025-06043-5 (2025).

2024

15. Fujiwara, N., Lee, D., **Li, B.**, Pierro, A. & Yamataka, A. Enhancement of enteric neural stem cell neurogenesis by glial cell-derived neurotrophic factor in experimental Hirschsprung's disease. **Pediatric surgery international** 40, 274, doi:10.1007/s00383-024-05861-3 (2024).
16. Ganji, N., Kalish, B., Offringa, M., **Li, B.,** Anderson, J., Baruchel, S., Blakely, M., De Coppi, P., Eaton, S., Gauda, E., Hall, N., Heath, A., Livingston, M. H., McNair, C., Mitchell, R., Patel, K., Pechlivanoglou, P., Pleasants-Terashita, H., Pryor, E., Radisic, M., Shah, P. S., Thébaud, B., Wang, K., Zani, A., Pierro, A. Translating Regenerative Medicine Therapies in Neonatal Necrotizing Enterocolitis. **Pediatric research** May 28. doi: 10.1038/s41390-024-03236-x (2024)
17. Wang, C.-Y., Li, M.-Y., Li, S.-Y., Wei, X.-G., Dong, N.-X., Liu, S. T., Yuan, Z.-W., **Li, B.**, Pierro, A., Tang, X.-B., Bai, Y. Z. Rack1-mediated ferroptosis affects hindgut development in rats with 2 anorectal

malformations: spatial transcriptome insights. **Cell Proliferation** Jul;57(7):e13618. doi: 10.1111/cpr.13618. (2024)

18. Lu, R. X. Z., Rafatian, N., Zhao, Y., Wagner, K. T., Beroncal, E. L., **Li, B**., Lee, C., Chen, J., Churcher, E., Vosoughi, D., Wang, Y., Baker, A., Trahtemberg, U., Li, B., Pierro, A., Andreazza, A. C., Dos Santos, C. C. & Radisic, M. Heart-on-a-chip model of immune-induced cardiac dysfunction reveals the role of free mitochondrial DNA and therapeutic effects of endothelial exosomes. **Sci Adv**. Mar 29;10(13):eadk0164, doi: 10.1126/sciadv.adk0164 (2024)
19. Zito, A., Wu, R. Y., **Li, B.,** Botts, S. R., Feizi, M., Lee, D., Lee, C., Johnson-Henry, K. C., Surette, M. G., Sherman, P. M. & Pierro, A. Human milk oligosaccharides promote intestinal epithelium regeneration independent of the microbiota during necrotizing enterocolitis. **Pediatr Surg Int** 40, 35, doi:10.1007/s00383-023-05598-5 (2024).

2023

20. Balsamo, F., **Li, B.,** Chusilp, S., Lee, D., Biouss, G., Lee, C., Maynes, J. T. & Pierro, A. Argon inhalation attenuates systemic inflammation and rescues lung architecture during experimental neonatal sepsis. **Pediatr Surg Int** 40, 21, doi:10.1007/s00383-023-05596-7 (2023).
21. Taibi, A., Tokar, T., Tremblay, J., Gargari, G., Streutker, C. J., **Li, B.,** Pierro, A., Guglielmetti, S., Tompkins, T. A., Jurisica, I. & Comelli, E. M. Intestinal microRNAs and bacterial taxa in juvenile mice are associated, modifiable by allochthonous lactobacilli, and affect postnatal maturation. **mSystems**, e0043123, doi:10.1128/msystems.00431-23 (2023).
22. Ganji, N., **Li, B.,** Lee, C. & Pierro, A. Necrotizing enterocolitis: recent advances in treatment with translational potential. **Pediatr Surg Int** 39, 205, doi:10.1007/s00383-023-05476-0 (2023).
23. Ganji, N., Biouss, G., Sabbatini, S., **Li, B.,** Lee, C. & Pierro, A. Remote ischemic conditioning in necrotizing enterocolitis. **Semin Pediatr Surg** 32, 151312, doi:10.1016/j.sempedsurg.2023.151312 (2023).
24. Ganji, N., Alganabi, M., Yamoto, M., Chusilp, S., Pierro, A. & **Li, B.**[#] Family care reduces the incidence of neonatal sepsis: A systematic review and meta-analysis. **Front Pediatr** 11, 1089229, doi:10.3389/fped.2023.1089229 (2023).

    [#]**Corresponding author**
25. Filler, R., Yeganeh, M., **Li, B.,** Lee, C., Alganabi, M., Hock, A., Biouss, G., Balsamo, F., Lee, D., Miyake, H. & Pierro, A. Bovine milk-derived exosomes attenuate NLRP3 inflammasome and NF-kappaB signaling in the lung during neonatal necrotizing enterocolitis. **Pediatr Surg Int** 39, 211, doi:10.1007/s00383-023-05490-2 (2023).
26. Chusilp, S., Balsamo, F., **Li, B.,** Vejchapipat, P. & Pierro, A. Development of liver inflammatory injury in biliary atresia: from basic to clinical research. **Pediatr Surg Int** 39, 207, doi:10.1007/s00383-023-05489-9 (2023).

27. Sabbatini, S., Ganji, N., Chusilp, S., Balsamo, F., **Li, B.** & Pierro, A. Intestinal atresia and necrotizing enterocolitis: Embryology and anatomy. **Semin Pediatr Surg** 31, 151234, doi:10.1016/j.sempedsurg.2022.151234 (2022).

2022

28. Kim, J.-E., **Li, B.,** Fei, L., Horne, R., Lee, D., Loe, A. K., Miyake, H., Ayar, E., Kim, D.-K., Surette, M. G., Philpott, D. J., Sherman, P., Guo, G., Pierro, A. & Kim, T.-H. Gut microbiota promotes stem cell differentiation through macrophage and mesenchymal niches in early postnatal development. **Immunity** 55, 2300-2317.e2306, doi.org/10.1016/j.immuni.2022.11.003 (2022).
29. Balsamo, F., Tian, Y., Pierro, A. & **Li, B.**[#] Amniotic fluid stem cells: A novel treatment for necrotizing enterocolitis. **Frontiers in pediatrics** 10, 1020986, doi:10.3389/fped.2022.1020986 (2022).
    #Corresponding Author
30. **Li, B**., Lee, C., Cadete, M., O'Connell, J. S., Alganabi, M., Lee, D., Ganji, N., Miyake, H., Botts, S. R., Johnson-Henry, K. C., Maattanen, P., Sherman, P. M. & Pierro, A. Amniotic fluid stem cell administration can prevent epithelial injury from necrotizing enterocolitis. **Pediatric research** 91, 101-106, doi:10.1038/s41390-021-01657-6 (2022).
31. Wu, R. Y.*, **Li, B.*,** Horne, R. G., Ahmed, A., Lee, D., Robinson, S. C., Zhu, H., Cadete, M., Alganabi, M., Filler, R., Johnson-Henry, K. C., Delgado-Olguin, P., Pierro, A. & Sherman, P. M. Structure-Function Relationships of Human Milk Oligosaccharides on the Intestinal Epithelial Transcriptome in Caco-2 Cells and a Murine Model of Necrotizing Enterocolitis. **Molecular nutrition & food research** 66, e2100893, doi:10.1002/mnfr.202100893 (2022).
    ***Contributed Equally**
32. Alganabi, M., Biouss, G., Ganji, N., Yamoto, M., Lee, C., Li, B. & Pierro, A. Remote ischemic conditioning causes CD4 T cells shift towards reduced cell-mediated inflammation. **Pediatric surgery international** 38, 657-664, doi:10.1007/s00383-022-05093-3 (2022).
33. Ganji, N., **Li, B.,** Ahmad, I., Daneman, A., Deshpande, P., Dhar, V., Eaton, S., Faingold, R., Gauda, E. B., Hall, N., Helou, S. E., Kabeer, M. H., Kim, J. H., King, A., Livingston, M. H., Ng, E., Offringa, M., Palleri, E., Walton, M., Wesson, D. E., Wester, T., Wijnen, R. M. H., Willan, A., Yankanah, R., Zozaya, C., Shah, P. S. & Pierro, A. Remote ischemic conditioning in necrotizing enterocolitis: study protocol of a multi-center phase II feasibility randomized controlled trial. **Pediatric surgery international** 38, 679-694, doi:10.1007/s00383-022-05095-1 (2022).
34. Wang, L., Gao, R., **Li, B.,** Alganabi, M., He, W., Shen, C., Zhu, H. & Pierro, A. Human breast milk-derived exosomes protect against intestinal ischemia and reperfusion injury in neonatal rats. **Journal of pediatric surgery** 57, 1264-1268, doi:10.1016/j.jpedsurg.2022.02.029 (2022).
35. Zhang, Z., **Li, B**., Jiang, Q., Li, Q., Pierro, A. & Li, L. Hirschsprung-Associated Enterocolitis: Transformative Research from Bench to Bedside. **European journal of pediatric surgery** 32, 383-390, doi:10.1055/s-0042-1745780 (2022).
36. Zozaya, C., Ganji, N., **Li, B**., Janssen Lok, M., Lee, C., Koike, Y., Gauda, E., Offringa, M., Eaton, S., Shah, P. S. & Pierro, A. Remote ischaemic conditioning in necrotising enterocolitis: a phase I feasibility and safety study. **Arch Dis Child Fetal Neonatal Ed**, doi:10.1136/archdischild-2022-324174 (2022).

2021

37. **Li, B.**, Lee, C., Chuslip, S., Lee, D., Biouss, G., Wu, R., Koike, Y., Miyake, H., Ip, W., Gonska, T. & Pierro, A. Intestinal epithelial tight junctions and permeability can be rescued through the regulation of endoplasmic reticulum stress by amniotic fluid stem cells during necrotizing enterocolitis. **FASEB journal,** 35, e21265, doi:10.1096/fj.202001426R (2021).
38. O'Connell, J. S.*, **Li, B.***, Zito, A., Ahmed, A., Cadete, M., Ganji, N., Lau, E., Alganabi, M., Farhat, N., Lee, C., Eaton, S., Mitchell, R., Ray, S., De Coppi, P., Patel, K. & Pierro, A. Treatment of necrotizing enterocolitis by conditioned medium derived from human amniotic fluid stem cells. **PloS one** 16, e0260522, doi:10.1371/journal.pone.0260522 (2021).
    ***Contributed Equally**
39. Antounians, L., Catania, V. D., Montalva, L., Liu, B. D., Hou, H., Chan, C., Matei, A. C., Tzanetakis, A., **Li, B**., Figueira, R. L., da Costa, K. M., Wong, A. P., Mitchell, R., David, A. L., Patel, K., De Coppi, P., Sbragia, L., Wilson, M. D., Rossant, J. & Zani, A. Fetal lung underdevelopment is rescued by administration of amniotic fluid stem cell extracellular vesicles in rodents. **Science translational medicine** 13, doi:10.1126/scitranslmed.aax5941 (2021).
40. Bindi, E., Alganabi, M., Biouss, G., Liu, J., **Li, B.**, Miyake, H., Angotti, R. & Pierro, A. Hepatic oxidative injury: role of mitochondrial dysfunction in necrotizing enterocolitis. **Pediatric surgery international** 37, 325-332, doi:10.1007/s00383-020-04816-8 (2021).
41. Chusilp, S., Lee, C., **Li, B.**, Lee, D., Yamoto, M., Ganji, N., Vejchapipat, P. & Pierro, A. Human amniotic fluid stem cells attenuate cholangiocyte apoptosis in a bile duct injury model of liver ductal organoids. **Journal of pediatric surgery** 56, 11-16, doi:10.1016/j.jpedsurg.2020.09.043 (2021).
42. Ganji, N., Koike, Y., **Li, B.**, Zhu, H., Lau, E., Lok, M. J., Lee, C. & Pierro, A. Doppler ultrasound assessment of splanchnic perfusion and heart rate for the detection of necrotizing enterocolitis. **Pediatric surgery international** 37, 347-352, doi:10.1007/s00383-020-04819-5 (2021).
43. Koike, Y., **Li, B.**, Chen, Y., Ganji, N., Alganabi, M., Miyake, H., Lee, C., Hock, A., Wu, R., Uchida, K., Inoue, M., Delgado-Olguin, P. & Pierro, A. Live Intravital Intestine with Blood Flow Visualization in Neonatal Mice Using Two-photon Laser Scanning Microscopy. Bio-protocol 11, e3937, doi:10.21769/BioProtoc.3937 (2021).
44. Lau, E., Lee, C., **Li, B.** & Pierro, A. Endoplasmic reticulum stress in the acute intestinal epithelial injury of necrotizing enterocolitis. **Pediatric surgery international** 37, 1151-1160, doi:10.1007/s00383-021-04929-8 (2021).
45. Maghraby, M. K., **Li, B.**, Chi, L., Ling, C., Benmoussa, A., Provost, P., Postmus, A. C., Abdi, A., Pierro, A., Bourdon, C. & Bandsma, R. H. J. Extracellular vesicles isolated from milk can improve gut barrier dysfunction induced by malnutrition. **Scientific reports** 11, 7635, doi:10.1038/s41598-021-86920-w (2021).
46. O'Connell, J. S., Lee, C., Farhat, N., Antounians, L., Zani, A., **Li, B.** & Pierro, A. Administration of extracellular vesicles derived from human amniotic fluid stem cells: a new treatment for necrotizing enterocolitis. **Pediatric surgery international** 37, 301-309, doi:10.1007/s00383-020-04826-6 (2021).
47. Zhu, H., **Li, B.**, Bindi, E., Lee, C., Alganabi, M., Lok, M. J. & Pierro, A. Remote ischemic conditioning avoids the development of intestinal damage after ischemia reperfusion by reducing intestinal

inflammation and increasing intestinal regeneration. **Pediatric surgery international** 37, 333-337, doi:10.1007/s00383-020-04831-9 (2021).

2020

48. Koike, Y.*, **Li, B.***, Ganji, N.*, Zhu, H.*, Miyake, H., Chen, Y., Lee, C., Janssen Lok, M., Zozaya, C., Lau, E., Lee, D., Chusilp, S., Zhang, Z., Yamoto, M., Wu, R. Y., Inoue, M., Uchida, K., Kusunoki, M., Delgado-Olguin, P., Mertens, L., Daneman, A., Eaton, S., Sherman, P. M. & Pierro, A. Remote ischemic conditioning counteracts the intestinal damage of necrotizing enterocolitis by improving intestinal microcirculation. **Nature communications** 11, 4950, doi:10.1038/s41467-020-18750-9 (2020).
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