

Curriculum vitae

Personal information:

Name: Xianshu Bai
Gender: Female
Date of birth: February 20th, 1985
Nationality: Chinese
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Academic education

2010.11-2015.6 Dr. rer. nat. (summa cum laude), Department of Molecular Physiology, University of Saarland, Homburg, Germany
Thesis: Response of oligodendrocyte lineage cells to acute brain injuries
Supervisor: Prof. Dr. Frank Kirchhoff

Scientific Career

Since 2025 Full Professor, School of Pharmacy, China Pharmaceutical University, Nanjing, China
Since 2023 Principal Investigator, Centrum für geschlechtsspezifische Biologie und Medizin (CGBM), University of Saarland, Homburg
Since 2018 PI/Group leader, Department of Molecular Physiology, CIPMM, University of Saarland, Homburg
2015 - 2018 Postdoc, Department of Molecular Physiology, Center of Integrative Physiology and Molecular Medicine (CIPMM), University of Saarland, Homburg

Honors and awards

2023 Alois-Lauer-Förderpreis für Medizin, Alois-Lauer-Stiftung
2022 Du Bois-Reymond prize, Deutsche Physiologische Gesellschaft
2010 - 2013 Marie Skłodowska-Curie Fellow, FP-People ITN-GA-2009-237956

Others

2019.1-2020.2 Parental leave

Memberships of scientific societies

Since 2021 The German Society of Biochemistry and Molecular Biology (GBM)
Since 2022 German Neuroscience Society (NWG)
Since 2022 Deutsche Physiologische Gesellschaft (DPG)
Since 2025 International Society for Neurochemistry (ISN)

Publications (<https://orcid.org/0000-0002-4758-1645>) (* shared authorship)

1. Zhao J, Agarwal A*, Bai X* (2025). Glial Wnt dialogue controls synapses. **Targetome** 1: e003

2. Fang LP, Zhao Y, Bai X (2025). Oligodendrocyte precursor cell-neuronal lysosomal pathway: A novel therapeutic target for neurodegenerative diseases. **Neural Regen Res**. Online print ahead. (Invited)
3. Fang LP, Lin CH, Medlej Y, Zhao R, Chang HF, Guo Q, Wu Z, Su Y, Zhao N, Gobbo D, Wyatt A, Wahl V, Fiore F, Tu SM, Boehm U, Huang W, Bian S, Agarwal A, Lauterbach MA, Yi C, Niu J, Scheller A, Kirchhoff F*, **Bai X*** (2025). Oligodendrocyte precursor cells facilitate neuronal lysosome release. **Nat Commun**. 16:1175.
4. **Bai X** (2024). Cytokine relay from the peripheral to the central – secrets behind fever. **Acta Physiologica**. 240:e14225. (Invited Editorial)
5. Haroon A, Seerapu H, Fang LP, Weiß J, **Bai X** (2024). Unlocking the Potential: immune functions of oligodendrocyte precursor cells. **Front Immunol**. 15:1425706. (Invited Review)
6. **Bai X**. Multiple Sclerosis: Exploring Sex Differences and Beyond (2024). **Neuroforum**. 30: 21-29. (Invited Review)
7. **Bai X***, Zhao N, Koupourtidou C, Fang LP, Schwarz V, Caudal LC, Zhao R, Hirrlinger J, Walz W, Bian S, Huang W, Ninkovic J, Kirchhoff F, Scheller A* (2023). After traumatic brain injury oligodendrocytes regain a plastic phenotype and can become astrocytes. **Dev Cell**. 58: 1153-1169. **Selected as 'DPG - Paper of the Month' Juli 2023.**
8. Fang LP, **Bai X** (2023). Implications of Olig2 silencing in oligodendrocyte precursor cells. **Neural Regen Res**. 18: 2649-2650. (Invited)
9. Fang LP, **Bai X** (2023). Oligodendrocyte precursor cells: the multitaskers in the brain. **Pflugers Archiv**. 475:1035-1044. (Invited Review)
10. Fang LP, Liu Q, Meyer E, Welle A, Huang W, Scheller A, Kirchhoff F*, **Bai X*** (2023). A subset of OPCs do not express Olig2 during development which can be increased in the adult by brain injuries and complex motor learning. **Glia**. 71: 415-430.
11. Fang LP, Zhao N, Caudal LC, Chang HF, Zhao R, Lin CH, Hainz N, Meier C, Bettler B, Huang W, Scheller A, Kirchhoff F*, **Bai X*** (2022). Impaired bidirectional communication between interneurons and oligodendrocyte precursor cells affects social cognitive behavior. **Nat Commun** 13: 1394. **Selected as editor's highlights in 'From brain to behavior' section.**
12. **Bai X**, Kirchhoff F, Scheller A (2021). Oligodendroglial GABAergic signaling: more than inhibition! **Neurosci Bull**. 37: 1039-1050