

Request-Based Biomedical Talent Search Brief

RBTS-26-001

Postdoctoral Researcher Opportunity in Oral Biomaterials, Tissue Engineering, and Dental Rehabilitation

Prof. Lei Jin's Group | Nanjing, China

Category: Request-Based Talent Search

Status: Open / Ongoing

Location: Nanjing, China

Position Type: Postdoctoral Researcher

Research Field: Oral Biomaterials, Tissue Engineering, Dental Restoration, Implant Dentistry, Oral and Maxillofacial Rehabilitation

Prof. **Lei Jin** is seeking motivated **postdoctoral researchers** to join her research group in Nanjing, China. This opportunity is available on a long-term and rolling basis.

Prof. Jin is a **Chief Physician, Professor, Doctoral Supervisor, and Postdoctoral Supervisor**. She serves as **Deputy Director of the Department of Stomatology at Jiangsu Province Hospital** and is affiliated with major medical universities including Nanjing University. Her work integrates clinical dentistry, oral rehabilitation, biomaterials, tissue engineering, and translational research.

Prof. Jin has long been engaged in clinical, teaching, and research work in **oral medicine and oral-maxillofacial tissue engineering**. Her clinical expertise includes minimally invasive dental restoration, aesthetic rehabilitation, implant dentistry, microscope-assisted treatment of complex root canal and periapical diseases, maxillofacial prosthetic rehabilitation, and oral health management for patients undergoing cancer radiotherapy or chemotherapy.

Her research program focuses on **oral biomaterials and tissue engineering**, including zirconia-based dental restorations, bone tissue engineering scaffolds, oral and maxillofacial defect repair, and clinically oriented regenerative strategies. She has led multiple National Natural Science Foundation of China projects and provincial-level research programs, and has published extensively in both Chinese and international journals.

Research Areas

Potential research directions include:

- Oral biomaterials and dental restorative materials
- Tissue engineering and regenerative medicine
- Bone regeneration and oral-maxillofacial defect repair
- Zirconia-based dental restorations and biomaterial fabrication
- Dental restoration, aesthetic rehabilitation, and implant-related research
- Oral and maxillofacial prosthetic rehabilitation
- Oral health management for cancer patients undergoing radiotherapy or chemotherapy
- Translational research connecting clinical dentistry and biomedical science

Available Position

Postdoctoral Researcher

The group welcomes highly motivated candidates with strong academic training in dentistry, stomatology, biomedical engineering, biomaterials, tissue engineering, regenerative medicine, molecular biology, cell biology, oncology-related oral care, or related biomedical fields.

Candidate Requirements

Applicants are expected to have:

- A PhD degree in dentistry, stomatology, biomaterials, biomedical engineering, regenerative medicine, biology, medicine, or a related field
- Strong research ability and scientific writing skills
- Experience in biomaterials, tissue engineering, cell experiments, animal models, bone regeneration, dental materials, or translational biomedical research
- A good publication record
- Motivation to conduct independent research and work within an interdisciplinary clinical-research team

Experience related to oral biomaterials, dental restoration materials, implant-related research, oral and maxillofacial tissue engineering, or cancer-patient oral health management would be an advantage.

Application Information

Interested candidates are welcome to submit:

- Curriculum vitae
- Brief statement of research interests
- Publication list
- Summary of previous research experience
- Contact information for references

This opportunity is open on a rolling basis until suitable candidates are selected.

For further information or referral, please contact us.

RBTS-26-002

PhD and Postdoctoral Positions in Cardiometabolic Disease Research

Prof. Gary Sweeney's Lab | York University, Canada

Category: Request-Based Talent Search

Status: Open / Ongoing

Location: York University, Toronto, Canada

Position Type: PhD Student / Postdoctoral Researcher

Research Field: Cardiometabolic Disease, Metabolism, Adiponectin Signaling, Molecular and Cellular Physiology

Prof. **Gary Sweeney** at **York University, Canada**, is seeking motivated **PhD students and postdoctoral researchers** to join his research group.

Prof. Sweeney is a **Full Professor in the Department of Biology at York University** and a **Tier 1 York Research Chair in Mechanisms of Cardiometabolic Disease**. His multidisciplinary research program focuses on the molecular, cellular, physiological, and translational mechanisms underlying **obesity, diabetes, heart failure, and cardiometabolic disease**, with a particular interest in **adiponectin signaling and metabolic regulation**.

The lab integrates molecular and cellular approaches, preclinical physiology, clinical relevance, and drug discovery-oriented research to better understand disease mechanisms and identify potential therapeutic strategies for cardiometabolic disorders.

Research Areas

Potential research directions include:

- Cardiometabolic disease mechanisms
- Obesity, diabetes, and heart failure
- Adiponectin signaling and adiponectin-related therapeutic strategies
- Glucose metabolism and metabolic regulation
- Molecular and cellular physiology
- Cardiac and metabolic remodeling
- Preclinical models of cardiometabolic disease
- Translational biomedical research and drug discovery

Available Positions

PhD Students

The lab welcomes applicants interested in doctoral training in biology, biomedical science, physiology, molecular medicine, metabolism, pharmacology, or related fields.

Postdoctoral Researchers

Candidates with strong research experience in molecular biology, cell biology, physiology, metabolism, cardiovascular biology, pharmacology, animal models, or translational biomedical research are encouraged to apply.

Candidate Requirements

Applicants should have a background in one or more of the following areas:

- Biology, biomedical science, physiology, or pharmacology
- Molecular and cellular biology
- Metabolism, diabetes, obesity, or cardiovascular disease
- Cardiometabolic disease research
- Animal models, cell-based assays, molecular experiments, or omics-related analysis
- Scientific writing and independent research experience

Previous experience in cardiometabolic disease, adipokine signaling, glucose metabolism, cardiac physiology, or preclinical disease models would be an asset.

Application Information

Interested candidates are welcome to submit:

- Curriculum vitae
- Brief statement of research interests
- Academic transcripts, if applying for a PhD position
- Publication list, if applicable
- Contact information for references

This opportunity is open on a rolling basis until suitable candidates are selected.

Contact / Referral

For referral, application guidance, or further information, please contact our team at:

Email: admin@nbiic.ca

Please include the opportunity ID **RBTS-26-002** in your inquiry and attach your CV, research background, representative publications if available, and a brief statement of research interests.

RBTS-26-003

Visiting Scholar and Postdoctoral Opportunities in Cellular pH Regulation, Membrane Transport, and Physiology

Prof. Walter F. Boron's Laboratory | Case Western Reserve University School of Medicine, USA

Category: Request-Based Talent Search

Status: Open / Inquiry-Based

Location: Case Western Reserve University School of Medicine, Cleveland, Ohio, USA

Position Type: Visiting Scholar / Postdoctoral Researcher

Research Field: Physiology, Cellular pH Regulation, Acid-Base Homeostasis, Membrane Transport, Renal Physiology, Brain Physiology, Gas Channels, Molecular and Cellular Physiology

Prof. **Walter F. Boron's laboratory** at **Case Western Reserve University School of Medicine**

focuses on fundamental mechanisms in cellular physiology, with particular emphasis on **intracellular pH regulation, acid-base homeostasis, bicarbonate transport, gas channel biology, and membrane transporter function.**

The laboratory is internationally recognized for its contributions to understanding how cells regulate intracellular pH and how membrane transporters and channels participate in physiological and pathological processes. Its research has broad relevance to kidney physiology, brain physiology, respiratory physiology, acid-base balance, and metabolic regulation.

This opportunity is suitable for motivated **visiting scholars and postdoctoral researchers** with backgrounds in physiology, cell biology, molecular biology, biophysics, renal physiology, neuroscience, or related biomedical fields.

Research Areas

Potential research directions include:

- Cellular pH regulation and intracellular pH homeostasis
- Acid-base physiology and metabolic regulation
- Na⁺/HCO₃⁻ cotransport and bicarbonate transporter biology
- Membrane transporters and ion transport mechanisms
- Renal physiology and kidney acid-base regulation
- Brain physiology and pH-related cellular mechanisms
- Gas channel biology and molecular mechanisms of CO₂/NH₃ transport
- Aquaporins, Rh proteins, and related gas-permeable channels
- Molecular and cellular physiology of transporter-associated diseases
- Biophysical and translational studies of membrane transport systems

Available Positions

Visiting Scholars

Researchers, clinicians, faculty members, or doctoral-level scholars with relevant academic backgrounds who are interested in short-term or long-term academic visits, collaborative research, or advanced training in cellular physiology and membrane transport research are

welcome to inquire.

Postdoctoral Researchers

Highly motivated candidates with strong research training in physiology, molecular biology, cell biology, biophysics, neuroscience, renal physiology, or related biomedical fields are encouraged to apply.

Candidate Requirements

Applicants should have a background in one or more of the following areas:

- Physiology, molecular physiology, or cellular physiology
- Cell biology, molecular biology, or biophysics
- Membrane transporters, ion channels, or gas channels
- Intracellular pH regulation and acid-base homeostasis
- Renal physiology, brain physiology, or respiratory physiology
- Electrophysiology, fluorescence imaging, molecular assays, or cell-based experiments
- Data analysis, experimental design, and independent research
- Scientific writing and academic communication

Experience with membrane transporter research, pH-sensitive measurements, cellular imaging, electrophysiological methods, renal or neural physiology models, or transporter-related disease mechanisms would be an advantage.

Laboratory Background

Prof. **Walter F. Boron** is a highly influential physiologist whose research has made major contributions to the fields of cellular physiology, acid-base homeostasis, and membrane transport. His laboratory has played an important role in identifying and characterizing key bicarbonate transport mechanisms, including the electrogenic $\text{Na}^+/\text{HCO}_3^-$ cotransporter NBCe1.

The laboratory's research addresses how cells sense and regulate changes in intracellular pH, extracellular CO_2 and HCO_3^- , and membrane transport activity. Its work has helped connect molecular transporter function with physiological processes in organs such as the kidney and brain, as well as with disease mechanisms related to acid-base imbalance and transporter

dysfunction.

Current research interests also include gas transport through membrane proteins, including aquaporins and Rh family proteins, and the molecular mechanisms by which CO₂ and NH₃ move across biological membranes.

Candidate Profile

This opportunity is particularly suitable for candidates interested in the intersection of **cellular physiology, molecular transport mechanisms, renal physiology, neuroscience, and translational biomedical research**.

Applicants with strong experimental skills, independent research ability, and interest in fundamental mechanisms of physiology are encouraged to inquire.

Application Information

Interested candidates are welcome to prepare:

- Curriculum vitae
- Brief statement of research interests
- Publication list, if applicable
- Summary of previous research experience
- Proposed visiting period, if applying as a visiting scholar
- Contact information for references, if available

This opportunity is open to qualified candidates with strong research potential in physiology, membrane transport, acid-base regulation, or related biomedical fields.

Please include the opportunity ID **RBTS-26-003** when making an inquiry.

Contact / Referral

For referral, application guidance, or further information, please contact our team at:

Email: admin@nbiic.ca

Please include the opportunity ID **RBTS-26-003** in your inquiry and attach your CV, research background, representative publications if available, and a brief statement of research interests.