

# ZhouLab Research Guide: Safety, Integrity, and Excellence

## 1. Safety First

- Personal Protective Equipment (PPE): Lab coat, gloves, and eye protection are required.
- Chemical & Biological Safety: Use fume hoods and biosafety cabinets as appropriate. Follow all labeling and disposal procedures.
- Emergency Procedures: Know evacuation routes and emergency contacts. Report incidents immediately.

## 2. Research Transparency

- Data Documentation: Use detailed ELNs; document methods and results in real time.
- Open Science & Reproducibility: Share protocols and datasets when possible. Use version control for code.

## 3. Ethics & Integrity

- Authorship & Credit: Discuss authorship early. Follow ICMJE guidelines.
- Scientific Misconduct: Zero tolerance for fabrication, falsification, or plagiarism.
- Responsible Collaboration: Communicate openly. Maintain confidentiality.

## 4. Manuscript Preparation

- Structure: Follow IMRaD format. Create clear, informative figures and legends.
- Review & Submission: Choose journals wisely. Disclose funding and approvals.
- Tools: Use Zotero, Overleaf, GraphPad, etc., for organization and formatting.

## 5. Lab Culture & Expectations

- Communication: Weekly lab meetings required. Use Slack/email for daily updates.
- Inclusivity: Foster a respectful, inclusive environment. Respect differences.

## 6. Data Storage & Digital Tools

- Backups: Use cloud and lab server. Backup weekly.
- Organization: Standardize file names and structures.
- Software: Follow institutional licenses. Use open-source tools when possible.

## 7. Training & Mentorship

- Onboarding: Safety and ethics training mandatory. Peer mentorship provided.
- Skill Development: Participate in workshops. Regular IDP meetings encouraged.

## 8. Conferences & Communication

- Abstracts & Posters: Prepare early. Focus on clarity and visual appeal.
- Social Media: Be professional. Don't share unpublished data.

## **9. Conflict Resolution**

- Disagreements: Resolve directly or escalate respectfully.
- Reporting Misconduct: Confidential reporting mechanisms available.

## **10. Acknowledgements & Exit Process**

- Citing Support: Acknowledge grants, facilities, and collaborators.
- Exit Procedures: Archive data. Exit interview with PI required.