Interview with Bing Sun

Part 1 Research Experience and Career Paths

Q: Hello, thank you for agreeing to this interview. We are junior students majoring in Biological Sciences in a Sino-foreign cooperative education program at the School of Life Sciences and Technology. This course is a PPEI (Personalized Learning and Group Collaboration) course taught by French faculty, mainly to train our communication, teamwork, and external interaction skills. Most of us plan to pursue further studies in the future, but we also hope to gain a better understanding of career development in the biology-related fields through this interview. To start, could you please introduce yourself? Also, could you briefly describe what your company does?

A: My name is Sun Bing. I started my undergraduate studies in 2004 and joined Professor Liu Jiankun's laboratory in 2008. The lab was in a formative stage, having recently secured several large projects. I joined at a time when it was developing, right after my professor returned from abroad, dealing with immense pressure to secure funds to keep the lab running. Our lab offered many opportunities; I stayed there throughout my undergraduate studies until graduation, making it a long-term association. Later, I joined a foreign company, known as PerkinElmer at that time, a Fortune 500 company. We eventually sold off all non-life science divisions. The company originally had four divisions: life sciences, diagnostics, newborn screening, environmental monitoring, and blood bank testing. The company later focused on biological sciences, forming a new company called Revvity, where I have continued to work, mainly responsible for designing technical solutions for research instruments and interfacing with clients.

I have experienced four key areas: research, technical services, drug development, and sales and technical support. During my Ph.D., my advisor founded a company with two main lines of business: outsourcing research services to address the lack of lab conditions for professors or hospitals, and the establishment of drug screening models and drug development. Currently, I am engaged in sales and technical roles, encountering nearly all types of professions in this field.

Q: We understand that you initially intended to pursue research, but later transitioned to a corporate setting. Could you elaborate on this process?

A: Near the end of my Ph.D., I was preparing to continue in research, with article submissions underway, which was a stressful time. During that period, I encountered a colleague from my current company. He used to visit our lab for printing materials, and I happened to be responsible for the printer, so we had interacted. One day, he mentioned a position at their company and asked if I wanted to try. I went for an interview, consulted with my advisor after being accepted, and ultimately decided to join the company, setting aside the research path. Initially, I wanted to do research, but having had the opportunity to manage a company for two years, I met many people in the industry. Thus, the transition to corporate life felt natural.

Q: You mentioned your career path includes research, research services, drug development, sales, and technical support, which is indeed very comprehensive. In our experience with presentations and alumni exchanges, most people typically develop deeply in one direction, but your scope is much broader.

A: Yes, they may deeply specialize in a single area, whereas I’ ve tried a bit of every type. This is due to encountering various opportunities and people along the way. Spending a long time in the lab means meeting many individuals, making it easier to access these opportunities.

Part 2 Talent Selection

Q: We are particularly interested in how undergraduate backgrounds impact employment. Our advisors mentioned that having a background from Huazhong University of Science and Technology is advantageous in the job market, but we want to know what this "advantage" specifically entails. How do companies view a 985 background during recruitment?

A: This is a great question. I'll start with a common phenomenon: many organizations emphasize your undergraduate institution when hiring, regardless of whether you hold a master's or even a doctorate. Some HR departments still focus on where you did your undergraduate studies. Some companies, though not openly stated, consider whether your bachelor's, master's, and Ph.D. were obtained at the same institution. Personally, when hiring, I place significant emphasis on the undergraduate background, especially for fresh graduates lacking doctoral experience. Why such importance on undergraduate performance? Simply put, the national college entrance exam is a rigorous selection process. Getting into a school like Huazhong indicates strong academic abilities and a solid foundation. Even if you’

re new to a specific field, you ’ ll likely learn quickly, showcasing potential that companies greatly value.

Additionally, more companies are valuing learning capability. Our company didn’ t initially hire fresh graduates due to training costs, preferring seasoned sales or technical personnel. However, since our industry is specialized with a significant emphasis on research foundation — and given my own research experience and adaptability — entering as a fresh graduate became feasible. Overall, if you’ re an inexperienced fresh graduate, having a 985 background at least serves as evidence of your learning capability.

Q: Apart from academic background, what other advantages do Huazhong students possess, in your opinion?

A: I particularly like Huazhong students; our company and lab have recruited several from there. Here are a few reasons:

First, the academic atmosphere is strong. Though gaming is common, the overall study environment is good, positioning the school as a top choice in Wuhan.

Second, it’ s socially well-regarded. Particularly in regions like Hubei, central China, and coastal cities like Shenzhen, Huazhong is highly recognized. Of course, Shenzhen’ s appreciation also ties to its strong computer and electronic programs.

Third, communication skills are improving. Although Huazhong traditionally leaned towards technical fields, where students were more reserved, today's students are becoming more proficient at expression and storytelling, which are incredibly important in businesses, especially in sales and customer interaction — being able to articulate a matter clearly is a crucial skill.

Q: Is expression really that important? We’ ve heard that some companies prefer to promote articulate employees, especially above mid-level positions, where this trend is quite apparent.

A: This phenomenon indeed exists and is increasingly prominent. I'll give you an example: it’ s not just in enterprise, academia is similar. You will eventually attend various conferences where conveying your work is crucial. Many do excellent research but fail to articulate it, a notable disadvantage. You mentioned earlier that at a company in the South, the number of middle-level managers from Wuhan University is twice that from Huazhong. This is factual; Wuhan University’ s debate

team is renowned, fostering a distinct expressive environment from the start — a result of historical development. In our early days, Huazhong was called Huazhong Institute of Technology with minimal emphasis on humanities, which improved over time, especially after President Yang Shuzi emphasized humanities.

Yet the key takeaway is how enterprises increasingly value expressive abilities. Some say "those who can present PPTs fare better than those conducting experiments," which, while disheartening, underscores that expression is an essential skill. The crux is your ability to articulate and highlight your strengths, a form of competitiveness.

Part 3 Personal Ability Development

Q: We've been reflecting on our learning process. Often, we follow directions from teachers or advisors, finding it challenging to independently connect and expand our skills. Yet, these abilities are incredibly important for future development, especially if seeking further growth and opportunities. Whether a duty or training, certain abilities are essential. During our university phase, although our academic atmosphere may not be as intense as literary majors, can we do something to improve ourselves? Are there daily activities or methods that could help us become stronger, more well-rounded individuals?

A: Yes, you've touched upon a vital point, a reason many appreciate Huazhong students — being assigned a task and executing it well is crucial for employers.

Put simply, from an "employee" perspective, this execution capability is valuable, provided task descriptions are clear. My wife once remarked, "You can't just say you're thirsty; specify where to get what type of water, at what temperature." Clarity in expression enables execution. Just stating thirst might evoke no response.

Many Huazhong students embody a so-called "straightforward" style: given specific instructions, they excel; if told, "there's a problem, solve it," they might resolve it, albeit without exceptional flair. This isn't negative, nor indicative of inferiority — different roles require varied displays.

Returning to your question on self-improvement, I have four suggestions:

First, deeply understand the industry. To delve into life sciences, you must engage in project development. This is the most direct industry insight approach. I'm unsure if you have opportunities for extracurriculars — collaborating on projects

with professors or seniors. Regardless of project complexity, strive for a comprehensive understanding of the entire process. Even if not hands-on, comprehend the project ’ s initiation, problem-solving, and presentation. This foundational knowledge supports any future career path.

Second, enhance expression and fitness. In times of indecision, pursue fitness and public speaking. Debate, in particular, refines logical input and output. If unable to join debates, practice speech-making. Listing what you want to convey, then expressing it, is a skill always beneficial.

Fitness fosters more than physical health; it cultivates perseverance. The study rhythm changes from high school to university — we engaged in games too but played soccer regularly, participating in college matches thrice weekly. Structured physical activities establish long-term self-discipline. During college, sustain a sports interest — studying politics or joining the student council — but prioritize speech-making and fitness.

Third, stay informed on cutting-edge technologies. Increasingly essential is knowledge and application of technologies like AI. Many view AI conceptually, yet its efficiency surpasses earlier methods. Initially skeptical of new tech due to a research background — I’ d think, “prove effectiveness before accepting” — I was late to AI. However, its capacity to enhance efficiency is evident, albeit requiring cautious use. In professional settings, AI assists with inspections and optimization. Understanding cutting-edge tech, linking it with your field, is highly valuable. Explore fusing research with new technology, embodying my third suggestion.

Fourth, grasp interdisciplinary content. This too is crucial. Though pursuing an MBA isn’ t mandatory, fundamental finance, business, and management knowledge is necessary. Legal understanding is also essential, as bio-medical sectors increasingly value legal experts, crucial for fields like bio-medical investment where finance and bio-medical literacy converge. I’ ve encountered setbacks in this regard. Familiarity with interdisciplinary subjects enriches perspectives, be it entrepreneurship or technical routes.

In summary, successful individuals I know excel in these four aspects: deep research prowess, expressive capabilities, staying attuned to cutting-edge tech, and cross-disciplinary comprehension. These elements present opportunities for university exploration. Mastery of each isn’ t compulsory, which might diffuse

focus; choose based on interests and future plans. Many students remain uncertain, thus sampling various angles may prove beneficial.

Part 4 Adapting to Interdisciplinary and Emerging Directions

Q: Indeed, our exposure to such aspects is limited. Beyond major courses, I learned some things from Mr. Peng, practicing speeches with him in spare time, which increasingly highlights the importance of expression. And regarding interdisciplinary studies, indeed computer science is nearly compulsory in our field. Even if lacking programming skills initially, bridging this gap later proves challenging.

A: You’re majoring in Biological Sciences, right? There should be a bioinformatics direction.

Q: Yes, we have that course and a designated direction.

A: Does your curriculum include programming like C++?

Q: Yes, it has changed significantly from before. We now emphasize programming. Truthfully, whether or not there’s formal instruction, it requires personal exploration. Entering university with zero computer knowledge, learning C++ was tough post-high school, resulting in poor grades. Later, self-study with books sparked interest. Each skill mastery prompted me to apply it to research experiments. Suppose during college, interdisciplinary training like speech, management, and fitness were integrated, easing adaptation as fresh graduates in new corporate environments. How can we overcome this "adaptation gap"?

A: This issue indeed exists. Our industry is relatively better, yet you might find that individuals with less prestigious academic backgrounds holding leadership positions over you is common.

My recommendation is first not to envy others. Anyone remaining in a position for some time possesses inherent capabilities. Secondly, many fresh graduates share a "restlessness." Leading teams in recruitment, early graduates performed well — identifying issues and seeking understanding. However, today’s youth seem influenced by social media, expecting certain income and positions, without considering self-improvement.

I’m not advocating overwork and loyalty to a job, but rather that even while fulfilling basic duties, further learning should persist. Many relax post-work with pastimes I too enjoy, yet I’m aware of my responsibilities and future tasks. When joining a company, initial knowledge or skill gaps are natural. Many mistakenly

believe recruitment implies perfect job-fit; it doesn’t. Companies value potential more — I seek two things in hiring: role fit and adaptability. If lacking immediate alignment but having potential and learning aptitude, you’re viewed favorably.

Students joining companies should temper prior accolades like "student council president" or "class topper." Past achievements are vital yet transforming them into present abilities carries greater importance. Equally vital is the company — some provide initial training followed by assignments without growth opportunities. Identify such firms during job searches. Tackling adaptation gaps is personal — no one else can assist. Persuade yourself that while initially lowering expectations, the potential for growth and space must persist. Avoid environments where a static five-year outlook prevails.

The first job significantly shapes industry perceptions. A poor start may impart lasting misconceptions about the sector. Deliberate this carefully; I lack explicit advice but encourage thorough contemplation.

Q: Today has been immensely insightful, thank you so much! A final small question: Could you offer advice for undergraduates eyeing further studies yet wishing to understand workplace dynamics?

A: I suggest engaging with external practices during studies, whether internships or visits — not necessarily immediate employment, but understanding genuine industry needs and work types. Conversations with seniors highlight directions beyond research: enterprises, entrepreneurship, policy, technical services, etc. Moreover, when entering companies, be it in R&D, sales, or marketing, cultivate expression, communication, and problem-solving skills. Nowadays, corporations, especially multinationals, assess beyond “capability” to “articulation,” “team leadership,” and “resource coordination.” Early cultivation offers early benefits.

Q: Thank you very much; this interview initially planned for 14-20 minutes evolved into a deeper conversation, revealing many areas for learning. We won’t impose further. Lastly, a course requirement: Can you suggest friends or colleagues in this industry for reference? We won’t disturb them, only use them as referral examples.

A: Not counting those in academia? Colleagues in our company's R&D are suitable. I’ll share my junior’s contact from Xian Dao Compound Company in Chengdu for you afterward.