Interview with Wenwen ZHOU

Part 1: Career Experience Sharing

Q: Could you please share your career experience with us?

A: My career experience is relatively simple. I'm not the kind of person who likes to switch jobs frequently. After graduating from graduate school, I've been working at Pfizer's Wuhan R&D Center for several years. I graduated from Professor Wang Ying's lab, which belongs to the Department of Biomedical Engineering. Later, I just joined my current team last year. Overall, my work experience isn't particularly extensive, but I did intern at two private companies before. Those were mainly short-term internships. My main professional experience is still concentrated in foreign enterprises. I worked at Pfizer for many years, which can be considered the core part of my career.

Part 2: Career Path and Deep Cultivation Advice

Q: For college students like us, your rich work experience is very valuable. Usually, our understanding of the workplace is more theoretical. Some say that after graduation, is it better to focus on one department or specialization and go deep, or is it better to switch between departments and positions to gain broader experience before deciding?

A: Personally, I prefer deep vertical development, which is also based on my own career experience. I didn't have a clear plan for my future career when I graduated, but because I had high expectations for myself, I eventually chose a path that suited me better. Many of my classmates continued doing pure research work in the lab after graduation, dealing with papers and experiments every day. But the research I do is pharmaceutical R&D, mainly handling clinical data-related matters, such as patient recruitment and GCP compliance. Most people in this field also come from pharmaceutical or medical backgrounds.

Some of my colleagues and classmates went into the medical industry, such as Mindray or other medical device companies, focusing on R&D in areas like IBD (inflammatory bowel disease). The reason I favor deep cultivation is because, whether you choose entrepreneurship or working in the industry after graduation, the biology field is one that requires long-term accumulation. To be honest, it's quite difficult for biology undergraduates to start their own business directly.

Q: I guess if someone wants to start a business, it would mainly be in sales or technical-related directions?

A: Yes, exactly. In terms of entrepreneurship, many people might choose to open distribution companies or similar “middleman” type of companies. But I think for students from HUST, this direction is not very advantageous. HUST students generally have their own academic pursuits and personal principles, so following that kind of “slick” business path may not compete well with people from other schools. Of course, I’m not saying HUST students can't do that, but I believe you can aim higher.

Nowadays, many entrepreneurs in the biology field usually hold PhD or postdoctoral degrees. They typically work deeply in a specific field, and once they’ve accumulated enough, they expand into other areas. I once interned at two private companies, and the CEOs shared their entrepreneurial experience with me. They said that whether it's starting a business or finding a job, the most important thing is to first establish a solid foundation in one area. Only after doing well in that area should you consider expanding horizontally.

Q: So, when we choose our future career direction, what do you think is the most important thing?
A: I think the key is to recognize your life track and clarify your future development direction. Especially for men, who may need to support a family in the future, it’s even more important to consider career choices carefully. Whether it’s R&D or other roles in a company, many PhDs and master's graduates focus on developing their expertise in specific fields, such as bioinformatics or MVE (mechanical ventilation efficiency). They keep digging into these fields and improving themselves, eventually gaining real competitiveness. Whether you choose entrepreneurship, research, or other careers, long-term deep cultivation is a stable and effective development path.

Q: Regarding job-hopping, what should we pay attention to in career development?
A: I think even if you want to change jobs, it should be within the same industry or similar positions, rather than across vastly different fields — for example, switching from R&D to sales. That’s a huge leap, and I really don’t recommend doing that.

Honestly, my initial career choice wasn’t particularly ideal, but I think I was quite lucky. From the beginning, I knew I didn’t like working with lab equipment and doing experimental R&D work. So I made a judgment — if I didn’t like it, I shouldn’t do it. Later, I chose to join Pfizer. Partly because I was attracted to the prestige of foreign companies, and partly because I liked the more regulated work environment and lifestyle.

But I gradually realized that the market environment is not constant. Both foreign and private companies are affected by market trends. For example, when the industry enters a “cost reduction and efficiency” phase, foreign companies also cut spending. They no longer maintain high

performance goals without overtime like before. To maintain profits, companies usually invest in new drug development, but only if they can foresee market returns. If such prospects don't exist, large-scale investment becomes hard to sustain. Pfizer is a typical example. It spent a huge amount on vaccine R&D and made a lot of money during the pandemic. But once the pandemic ended, the significance of such large investments diminished, so the company began cutting expenses. This phenomenon is actually common across the entire industry.

Q: Faced with industry changes, how did you adjust your career development direction?

A: Actually, I don't have a very strict career plan — like reaching a high position in a certain company. I used to fantasize about future goals, but later found that reality may differ from expectations. Still, even if there are deviations, I believe that as new-generation HUST graduates, you should try to plan every career step in advance.

Even if the final outcome isn't perfect, as long as you're working hard in the right direction, you're not making a mistake. Compared to the past, today's world doesn't offer you as many opportunities. So within the limited conditions, if you can prepare yourself well, you're already ahead at the starting line.

Often, success not only depends on personal effort but also on the "wind of the times." But if the wind comes and you're not ready, lack a sense of urgency, or haven't worked hard for the opportunity, you'll likely miss it. So I think the key in the workplace is preparation — only then can you truly seize opportunities when they arise.

Q: Actually, the further we go, the fewer opportunities there may be.

A: Relatively speaking, that's true. Opportunities still exist, but the situation is different from your parents' generation. In the past, putting in 100% effort could bring back 80% or more in returns. But now, competition is tougher. You have to work harder to achieve similar results. For undergraduates in biology, the path is quite narrow. Either pursue further education or change fields. Even if you graduate from Tsinghua or Peking University, the starting salary might still be only a few thousand yuan. Frankly speaking, the whole industry won't pay you more just because you're from a 985, 211, or even C9 university. After graduation, the work may just be culturing cells, doing experiments, or switching fields entirely.

Q: If switching fields, do you have any suggestions or ideas for reference?

A: If you want to change fields, it's a bit beyond my personal experience, so I don't know the specifics. For biology majors, the most stable choice is still to pursue higher degrees — master's, PhD — and then do research at universities or institutes. This path is relatively stable, though not

highly paid, unless you reach the top of the industry, such as becoming an investment consultant. But that path is extremely difficult. So I think you should plan every step of your career path as early as possible. After all, the current job market isn't very friendly to biology majors.

Q: We previously prepared some questions. For example, during the job hunt, have you seen people from non-biology backgrounds enter the biology field, or biology-background people switching to other fields?

A: You mean non-biology backgrounds joining biology companies?

Q: Yes, or biology-background people developing in other fields?

A: That's actually quite common. For example, pharmaceutical companies don't only hire biology majors. Business development roles may require strong foreign language skills and don't necessarily need a biology background. But if you have both biology knowledge and English skills, that's a huge advantage — a "killer combo." So I suggest you really improve your spoken English; it's extremely important.

As for biology-background people moving into other fields, that's also very common. Many biology majors switch to computer science, AI, and similar areas, mainly because the pay is better. But I think career choices shouldn't be entirely driven by money. From a long-term life perspective, interest and capability alignment is more important.

Q: So what's the importance of interest and long-term planning in career choices?

A: Many people think that if they studied a major, they must stay in that field. But actually, career choices result from multiple factors. Some people switch from biology to computer science or AI just to pursue higher income. But from a long-term view, industry booms might last only a few years, while a person's career spans decades.

I really encourage you to be interest-driven. Choose something that feels effortless and gives positive feedback. If you're interested in something and willing to dig into it, and it gives you a sense of achievement — that's the most important, not just salary.

Q: What are the advantages of an interest-driven career?

A: Interest-driven careers make you more focused and less likely to face a mid-life career crisis around 35. For example, I've seen many people around me who achieved great results after long-term dedication to a field because of genuine interest. In contrast, those who pick a job purely for a high salary may feel lost once the "boom" ends.

Take myself as an example — my salary isn't high, but I'm happy working with lovely

students in a school environment every day. This kind of internal satisfaction is more valuable than just money. I hope you can also follow your heart and not sacrifice your long-term potential for short-term interests.

Part 3: Biology Major Employment Situation and Advice

Q: I've noticed that in our cohort (class of '22), many students, especially those from other departments like the Humanities, have lower requirements for graduate degrees. Some of them can submit resumes to major companies like Xiaomi right after graduating, and some are already interning in Beijing. However, it seems that students in our Biology department are often told that the job market is challenging. What's your opinion on this?

A: You have chances at major companies too, but the bar has indeed been raised, often requiring a master's degree. Nonetheless, I know people who joined major companies like Huawei and JD.com after completing their bachelor's or master's degrees. Although coding may seem difficult, you could explore positions like product manager. Moreover, some major companies undertake biology-related projects and need professionals with a background in biology. You should research these directions and see if there are opportunities that match your interests and skills.

You are correct that students from Humanities or Law are more likely to intern or find jobs immediately after undergrad. My family is involved in law; they transitioned into the workforce after their undergraduate studies. However, for science and engineering fields, especially in biology, chemistry, and materials, it is indeed more difficult.

Q: For science students, particularly in biology, do you have any career planning advice?

A: If you do not plan on pursuing an academic path, like continuing with a Ph.D., postdoc, and eventually becoming a university teacher, you need to explore employment opportunities in industries. Competition for academic positions is very intense, even for Ph.D.s or postdocs from elite schools, returning to teach in universities is challenging. Some seniors I know had their entire academic journey at Huazhong and Wuhan University, continued their studies in France and the US, and yet struggled to secure positions even at second-tier or non-prestigious universities back home—unless their advisor has good connections to help with recommendations.

Thus, if you don't aim for academia, you should try venturing into the outside world. There are many platforms for job hunting nowadays, like BOSS Direct Employment, Zhaopin, Liepin, and even Momo. You can actively connect with industry professionals on these platforms; for example, you could send a private message introducing yourself: "Hello, I am a student of Biological Sciences at Huazhong University of Science and Technology and am interested in the

XX position at your company. Could you let me know if there are suitable opportunities for me?"

I believe honesty is the best mode of interpersonal communication. If the person doesn't have a suitable position at the moment, you can ask them to contact you when there's an opportunity or to provide their contact details. Just like celebrity studios sometimes respond to fans' messages, you never know until you try, which might create opportunities.

There are indeed many opportunities in the biology field. I suggest taking some time for career planning, listing possible development paths, such as the pharmaceutical industry, biotech companies, bioinformatics, or bio-investment.

The pharmaceutical industry has many niche roles, such as clinical monitor, data manager, and clinical operations assistant. These roles vary in career prospects and salary levels, which you can analyze to see which suits you best.

Biotech companies also offer many directions, such as technical support, product manager, and researcher. The potential and development paths for different roles may vary.

Moreover, there are cross-industry paths, like bioinformatics, which merges biology with computer science, currently a hot field. Many major companies are working on biometric projects like fingerprint and facial recognition algorithms and need relevant talent.

If you're interested in finance, bio-medical investment is an option, though its barriers are high and workload demanding, but with good compensation. Especially in Beijing, bio-investment firms frequently hire interns; you should keep an eye on this.

Overall, I believe biology students should define their direction early, not necessarily sticking strictly to their major. Instead, combine your interests, skills, and long-term goals to plan your career path, enabling you to seize real opportunities in the future.

Q: Will these cross-industry directions be more challenging?

A: Yes, cross-industry paths indeed have certain difficulties, but if you are willing to try, there are still plenty of opportunities. The demand for bioinformatics is high, with promising development potential. Although bio-medical investment is highly competitive, having relevant internship experiences can fully allow you to enter the industry. My husband transitioned from a biology background to bio-medical investment, a classic example of crossing fields.

In conclusion, do not wait for opportunities—create them. You are students of Huazhong, inherently bright and capable, with good English skills. Why not boldly try? Every opportunity in life should be actively grasped, allowing you to find your own career path.

Q: I previously spoke with my advisor, who mentioned that in our field, hardware conditions are

still very important for job hunting.

A: Yes, it mainly depends on your education level. Graduating from Huazhong already gives you a significant advantage.

Q: He mentioned significant differences in educational levels among bachelor's, master's, and doctoral degrees. He specifically noted that research institutes highly value educational qualifications. However, I feel some undergraduates might lack experimental skills, making their core competitiveness weaker.

A: That's why you should participate in more competitions to showcase your abilities. Let me know your statistics—how many competitions you've participated in, how many awards you've won, and your lab experience. Regardless of which school you come from, after a bachelor's program, the differences aren't substantial, especially in the biology field; that's a common challenge.

Q: I heard that students from other departments can smoothly submit resumes to Xiaomi and get hired, without needing special connections, just through the official website. But it seems different for our field.

A: That's indeed the case. Majors like Literature, Arts, and Humanities can engage in promotions in major companies without needing programming skills. Many roles are industry-generic, such as HR. But for our field, it's more niche, usually within biology or pharmaceutical companies, requiring deeper expertise to advance further. You need to consider whether to pursue further studies or broaden your scope. I believe life is like a vast field, offering a chance to try different paths. If you aim for major companies, I suggest starting with internships. Internships help you quickly discover the needed skills and establish connections with the company.

In the social world, brief interactions between people are common. You need to maximize these interactions to gather valuable information. For example, by communicating with company people, you gain insights that aid your career development. In society, interpersonal exchanges are prevalent and frequent. By making things easier for others, they're more willing to help you—it's a normal interaction. Frankly expressing your needs is not shameful; when you're outstanding, others are more willing to lend a hand.

Q: Since we're discussing employment, especially in the economic sector, you mentioned the brief communication between colleagues or company leaders. We didn't specifically learn this in college, but after entering the workplace, we find things differ from our previous values. There can be a perception gap in interest points. As students, when we enter companies, will there be other discontinuities? Like when we used to think A is A, B is B, or A is B, B is C, but upon

entering, we find it’s not quite so.

A: I believe you should first adjust your mindset, not viewing the company and yourself as oppositional. Society isn’t that frightening; what's important is maintaining an open attitude. In school, our knowledge channels are singular, like being spoon-fed information by teachers. But upon entering a company, your mindset needs a shift, not resisting the company or believing it’s overwhelmingly tough. In essence, whether in school among peers—where competition exists like vying for limited top spots—it’s all similar.

First, set your mindset right. Secondly, adopt proactive thinking. In a company, you earn through your work—that’s the essence. But the company won’t directly feed you information like school; you must seek and ask for it. Quickly grasping your job responsibilities is crucial. The demonstration of ability relies on thoroughly understanding your role, though ability itself is quite subjective.

You should actively learn about your products, better grasping them through training or market feedback. When selling products, rely not only on company channels but also on proactively building relationships, like associating with school teachers to expand sales avenues. Proactivity is vital for enhancing capabilities.

Of course, in work, relying on others is needed, but accomplishing tasks mainly depends on oneself. Within a company, you must know your responsibilities. In terms of mindset, you should recognize: efforts might not reap immediate rewards—good companies provide returns, but in poor markets, your efforts might not lead to promotions or pay raises. Major companies are relatively better; small companies struggle more. That’s why many people feel lost around 30, trying hard yet observing minimal results.

Moreover, there’s a valuable lesson in life: don’t assume your efforts will always yield results—accept what life presents gracefully. Being healthy and employed is already quite nice. Even if a lifelong academic like an outstanding teacher doesn’t receive promotions, initially, the viewpoint should be a love for your work. It offers a good return; even if external social standing and wealth aren’t the best, they should be accepted serenely. This attitude is crucial.

Q: I’ve noticed that many truly discover job roles after entering positions. When job hunting, we usually only see position titles from websites or recruitment info. Are there more effective methods to understand these roles in detail?

A: Your inquiry concerns method, and in China’s market environment, I think direct contact and communication are best. Like right now, if I just handed you a document showcasing job experience, you might not feel any deep understanding. But establishing connections with

companies changes things.

Your school possesses many resources; I've seen Nobel laureates, academicians, scholarly figures, and company speakers like Mingde, Savills, Mindray, and Ruiqiankang Biological. Even if you don’t fully grasp their messages, it’s an opportunity for recognition. Speeches often involve typical corporate growth topics, yet you observe corporate culture within. For instance, frequent distribution of company gifts hints at financial strength; high-caliber speakers indicate strong promotional skills.

During Q&A or private exchanges after speeches, request to add contacts by saying: "Professor, let's connect on WeChat; I’d like to learn about your company." At the very least, they’ll remember you. I recall an interesting example where Yang Tianzhen was recognized while skiing in Switzerland and handed a resume. Though vacancies might not arise instantly, boldly creating opportunities deserves commendation.

Q: You mentioned graduates from Huazhong—whether bachelor’s, master’s, or doctoral—are well-regarded, having solid backgrounds serving as a qualified door-opener. But circumstances no longer seem to guarantee major companies ‘green-light’ 985 graduates indiscriminately; firms focus more on practical competencies.

A: Precisely. In my view, Huazhong and most 985 institutions align training with societal needs. I understand your stance; employers utilize logic in employing staff for expansion, demanding teamwork rather than individual overhauls. Employers are also practical workers, prioritizing holistic product sales.

During recruitment, they ponder collaboration—who’ll work with you? Choosing a student from an average school might mean slower adaptation. Those from 985 or 211 schools, if not technically strong, at least showcase themselves as disciplined and polite individuals. Enterprises value these subtle qualities, preferring associates who interact comfortably.

Q: I grasped that abilities and motivations within 985 and 211 graduates appeal to employers, not just textbook knowledge or lab skills.

A: Exactly, many skills and knowledge aren't demonstrable during interviews, particularly with biology-related majors; law, for instance, offers simple recitations of statutes to show competence. Assessing these majors quantitatively is harder; biology doesn’t readily display skills through trials, and proving article publications is tough.

Biology lacks quantification, whereas programming gains fast assessment via technical tests. Consequently, companies anticipate 985 or 211 graduates to contribute—whether through literature reviews or product enhancement proposals—beyond mere foundational duties.

Differentiation begins in graduate studies, where papers emerge and research paths clarify. Bachelor’s phases are difficult for straightforward competence evaluations, but master’s and doctoral stages introduce distinct specialized variations and divisions.

Q: Yesterday's lengthy discussion was profoundly fruitful. Within the university setting, we remain uninformed, uncertain whether our understanding aligns when venturing out. Your consultation provided clarity, answering several doubts.

A: I'm not particularly successful.

Q: Your advice appeared practical, capturing authenticity.

A: Yes, indeed genuine. Despite lacking in professional triumph, it doesn’t affect my communication with you. To me, life’s success doesn’t derive from title or wealth tiers. Many accomplished individuals haven’t amassed wealth nor acquired high-ranking positions. Instead, respect society more for your actions, deeds, and persistence, less about titles or affluence.

My husband shared an inspirational story: a custodian spent decades sweeping, believing himself the happiest in his role, gaining immense joy and purpose. Though you might not become custodians, maximizing learned knowledge and platforms for personal passions leads to embracing life’s opportunities optimistically.

What's truly crucial is leveraging your collegiate moments smartly. Professors' teachings are easily grasped in company and society settings. As youth peak energetically, contemplate future routes collectively. I just offered a method: through assorted platforms, coordination among classmates, periodic communication. Engage enterprises and academicians; they’re generous in sharing since everyone appreciates being listened to. Seize nearby opportunities—whether internships, ask the reasons behind them, their significance, and potential benefits—they exist for reasons.

Q: Particularly in college, opportunities are ever-present. For example, a teacher might assign organizing a conference. Simple tasks, but executing well invites guidance or resources.

A: Commonly stated is the notion of people’s path broadening with time. Though sometimes mundane, I perceive continuous learning, like boosting English skills; without current employment, such skills may favorably open future prospects. The same principle applies to company tasking—give your utmost not for praise, but for satisfaction and skill development upon completion.

Accomplishing tasks yields both accomplishment and potential value. Every step taken isn’t in vain; education, every endeavor carries latent impacts. Whether pursuing teacher qualifications or schooling, these experiences eventually exert influence. Regarding health experiments, initially

seeing no results transpires in delayed changes. Adoring celebrities or indulging in fandoms, every path traveled holds rationale, appearing at pivotal life moments. Ideally, when recalling Teacher Zhou's words, recognition occurs—if so, my success is achieved. Life harbors significant delays, which are normal.

Q: Prior misunderstood elements may appear instrumental later in life. College elucidates sayings or idioms introduced during primary education.

A: Indeed, that's true.

Q: Thank you for participating in our interview today.