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Interview Report

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Recommended Handbook Content Based on Interviews with Sector
Representatives



1. Overview

The interview provides a comprehensive real-life perspective on the essential competencies, career strategies, and professional development paths within the agro-biotechnology sector. The expert's reflections illustrate how technological transformation, continuous learning, and proactive career planning are shaping the future of the industry. His career story—from research internships to international postdoctoral experiences—offers valuable lessons on resilience, specialization, and lifelong training.

The insights are well suited for inclusion in several handbook modules, particularly those addressing sector developments, skill requirements, career planning, and professional growth.

2. Sector Developments & Skills Expectations

The expert emphasized that the agro-biotech sector is experiencing a technological revolution that requires graduates to possess both biological system understanding and digital literacy.

Recommended content points for the handbook:

- Future professionals must understand how agrosystems function and develop the ability to model and reproduce them using mechanistic approaches.
- Core competencies include data science, programming, and the ability to interpret biosensor data to manage plant and environmental interactions.
- Employers prioritize proactivity, curiosity, and technological adaptability when hiring new graduates.
- Motivation and passion for the field are as important as technical expertise.

Suggested handbook subheading:

“Technological Skills and Attitudes for the Next Generation of Agro-Biotech Professionals”

Include a table summarizing key emerging skills (data analysis, programming, biosensor management, modeling) alongside desired soft skills (initiative, teamwork, lifelong learning).

3. Self-Assessment and Goal Setting

This section of the interview offers strong reflections on career decision-making, goal formation, and resilience in overcoming professional challenges.

Recommended content points:

- Early exposure to research during degree projects can significantly influence career direction.

- The expert’s experience shows that career goals may evolve over time—from seeking high-level institutional positions to valuing hands-on research and fieldwork.
- Success is defined not by rank but by alignment with personal passion and purpose.
- Overcoming challenges—such as securing research funding or pursuing unpaid training opportunities—demonstrates the importance of perseverance and self-investment.

Suggested inclusion:

A reflection exercise titled “*Redefining Success*” where students are prompted to write how their definition of success might change over time and which values guide their choices.

4. Networking, Job Search, and Interview Strategies

The interview presented excellent practical advice for building and maintaining professional relationships and navigating early career stages.

Recommended content points:

- Networking with senior researchers and mentors is one of the most effective ways to access job opportunities in academia and research.
- LinkedIn and research networks are valuable tools for identifying positions and following sector leaders.
- Proactive communication, such as directly contacting researchers or institutions, increases opportunities for collaboration.
- During interviews, a positive attitude, willingness to learn, and teamwork spirit are often more valued than an extensive CV.
- Early-career professionals should prioritize learning and experience over salary, viewing initial roles as opportunities for skill accumulation.

Suggested handbook inclusion:

A checklist titled “*Preparing for Interviews and Building Your Network*” including steps such as:

Identify five professionals in your field to follow.

Practice describing your motivation and learning goals.

Prepare one question that demonstrates curiosity about each company or lab.

5. Training and Professional Development

The expert provided a clear framework for continuous learning and keeping up with technological advances in the agro-biotechnology field.

Recommended content points:

- Staying informed through research platforms (e.g., ResearchGate) and industry news helps bridge scientific and commercial innovation.
- Continuous learning involves reading scientific publications behind commercial applications and enrolling in specialized courses on emerging methodologies.
- Exposure to international research environments can reshape professional perspectives and introduce new analytical approaches (e.g., using sensors for mechanistic modeling rather than only data collection).
- Lifelong learning and self-driven training are essential to remain competitive in the evolving agro-biotech sector.

Suggested sub-section title:

“Continuous Learning in Agro-Biotechnology: From Research Papers to Real-World Applications”

Include a diagram showing the learning cycle: *Reading* → *Experimenting* → *Training* → *Applying* → *Reflecting*.

6. Career Advancement and Mentorship

This portion of the interview highlighted the critical role of mentorship, strategic training choices, and working with high-level professionals to accelerate development.

Recommended content points:

- Having a mentor who transmits passion and discipline is invaluable for building both technical expertise and professional integrity.
- Learning under demanding supervisors fosters resilience and excellence.
- Career advancement should be guided by quality of training and choice of mentors, not only by institutional reputation.
- Students should aim to reach high specialization in their chosen subfield to stand out in the competitive market.

Suggested handbook inclusion:

A case-based example: *“The Mentor’s Role in Career Growth”*—a short profile describing how mentorship supports skill development and decision-making.

7. Pedagogical Implications for the Handbook

Including these insights were considered to enrich the handbook by:

- Connecting theoretical modules with authentic career narratives.
- Encouraging reflective learning through exercises and case analysis.
- Demonstrating how attitude, adaptability, and continuous learning are as vital as technical expertise.

- Inspiring students to plan their professional paths proactively within the Project-Based Learning framework.

8. Summary Table of Integration Points

Handbook Module	Recommended Additions	Educational Focus
1. Sector Developments & Skills Expectations	Data science, programming, technological adaptability, passion for learning	Technological literacy & motivation
2. Self-Assessment and Goal Setting	Redefining success, perseverance, aligning goals with personal passion	Career reflection & values
3. Networking and Job Search	Active networking, communication, prioritizing experience over salary	Employability & social capital
4. Training and Professional Development	Research-based learning, lifelong training, exposure to global practices	Continuous professional growth
5. Career Advancement and Mentorship	Importance of mentorship, specialization, and learning under experts	Leadership & career resilience