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agrobiotech

ACADEMIA TO CAREER

Interview Report

Prepared by IDEA

Recommended Handbook Content Based on Interviews with Sector Representatives

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MELLIS

1. Overview

The interviews with Dr. Eva Tvrdá (Senior Researcher, Reproductive System & Sexual Disorders) and Dr. Filip Benko (Cell Culture Specialist) provide valuable guidance for students pursuing careers in agrobiotechnology.

Their reflections emphasize practical experience, international exposure, research adaptability, and continuous self-improvement as the foundation of a successful professional journey in biotechnology.

Both experts highlight that enthusiasm, responsibility, and flexibility are as critical as technical skills. Their experiences illustrate how laboratory competence, international networking, and self-directed learning collectively shape career success in modern biotechnology.

2. Sector Developments & Skills Expectations

Key themes to include:

- Practical laboratory skills remain the backbone of agrobiotechnology. Students should be proficient in:
- Sample preparation, laboratory protocols, and data interpretation.
- Critical thinking and scientific debate.
- Team collaboration and professional communication.
- Soft skills—such as responsibility, teamwork, and open-mindedness—are equally essential.
- Both researchers stress that international experience and cross-border collaboration give graduates a distinct advantage.
- The ability to adapt to new technologies, especially in lab analysis and biotech innovation, is indispensable.

Suggested handbook integration:

Section: *"Core and Emerging Skills in Agro-Biotechnology"*
Add a comparative table separating Technical Competencies (lab methodologies, data handling) and Transversal Competencies (teamwork, debate, adaptability).

Quote for insertion:

"Practical skills can be taught, but enthusiasm and responsibility must come from within." — *E. Tvrdá*

3. Self-Assessment and Goal Setting

Relevant content:

- Career goals often evolve organically, guided by professional experiences and mentoring.
- Tvrdá emphasizes learning independence and self-management, especially in lab research.
- Benko's path demonstrates the value of continuity from academic research to professional work, showing that steady dedication can yield satisfying progress.
- Both advise young professionals to view their careers dynamically, adjusting goals as new opportunities emerge.

Suggested handbook integration:

Activity: *"Setting Flexible Career Goals"*

Students outline short-term and long-term goals, then identify potential turning points or shifts they might encounter (e.g., pursuing research abroad or transitioning to industry).

Key takeaway:

Success in biotechnology develops through persistence, openness to change, and self-directed learning.

4. Networking, Job Search, and Interview Strategies

Insights for inclusion:

- Both researchers underline the importance of networking through academic and professional channels, including:
- Conferences, workshops, and international collaborations.
- Platforms such as LinkedIn, ResearchGate, Euraxess, and Slovakia's Profesiu.sk.
- Networking should be active and reciprocal—maintained via email, social media, and collaboration.
- For interviews, both recommend researching the employer, reading employee reviews, and preparing with confidence and authenticity.

Suggested handbook integration:

Subsection: *"Networking in Scientific and Research Careers"*
Include a step-by-step guide to building a professional online profile and maintaining relationships post-conference.

Quote for inclusion:

"Conferences are the best place to meet professionals and form collaborations that can shape your career." — *F. Benko*

5. Training and Professional Development

Relevant elements:

- Both Tvrdá and Benko stress that biotechnology requires lifelong learning through:
- Participation in workshops, online courses, and seminars.
- Continuous literature review and engagement with scientific publications.
- Following global science news platforms like *National Geographic, New Scientist, Tech FM,* and *ResearchGate*.
- Tvrdá highlights the value of surrounding oneself with diverse and experienced colleagues, learning both technical and interpersonal lessons from them.
- Benko describes publication of research results as both a professional milestone and a motivator for skill advancement.

Suggested handbook integration:

Section: *"Building a Habit of Continuous Learning"*
Add a "Professional Growth Cycle" diagram: *Learn → Apply → Share → Reflect → Innovate*.

Key takeaway:

"Professional growth in biotechnology depends on your ability to keep learning, adapting, and connecting scientific progress with personal development."

6. Career Advancement and Mentorship

Themes for inclusion:

- Mentorship and teamwork play a central role in professional development.
- Tvrdá draws motivation from her mentors, peers, and young students.
- Benko emphasizes mentorship as a source of decision-making wisdom—helping to navigate complex choices in evolving research environments.
- Both value collaborative environments where mutual respect and intellectual curiosity drive innovation.
- Decision-making is strengthened by:
- Gaining varied experiences.
- Learning from mistakes and feedback.
- Staying open to different viewpoints.

Suggested handbook integration:

Subsection: *"Learning from Mentors and Colleagues"*
Include reflection questions such as:

"Who has influenced your career growth the most?"

"What qualities make an effective mentor in biotechnology?"

Quote for inclusion:

"Strong decision-making skills come from experience, feedback, and surrounding yourself with people who inspire and challenge you." — *E. Tvrdá*

7. Advice for Future Professionals

Advice suitable for direct inclusion:

- Be proactive and open-minded. Apply for various positions—even those that seem outside your initial interests.
- Gain international experience through internships, Erasmus programs, or research stays abroad.
- Don't fear failure—every attempt builds resilience and insight.
- Flexibility and collaboration are keys to long-term success.
- Benko adds that exposure to different work cultures enhances adaptability and broadens professional perspective.

Suggested handbook integration:

Section: *"Practical Advice from Agrobiotech Experts"*
Include a "Do & Don't" box:
Do: Pursue internships, learn continuously, stay open to new directions.
Don't: Limit yourself to one specialization or expect linear career progress.

Quote for insertion:

"Be open to expanding your specialization beyond your initial expectations. Flexibility can lead to the most rewarding career paths." — *F. Benko*

8. Pedagogical Implications

Integrating the insights of Tvrdá and Benko into the handbook will:

- Reinforce Project-Based Learning (PBL) principles through real-world examples.
- Strengthen career readiness by linking academic training to actual industry and research needs.
- Encourage reflective learning and self-awareness through mentorship-inspired exercises.
- Highlight gender inclusivity and collaboration in biotechnology, showing diverse paths to success.

9. Summary Table of Integration

Handbook Module	Proposed Additions	Educational Focus
1. Sector Developments & Skills Expectations	Lab skills, teamwork, international exposure	Employability & practical readiness

2. Self-Assessment & Goal Setting	Independence, flexibility, self-motivation	Adaptability & resilience
3. Networking & Job Search	Online platforms, conference networking	Professional visibility
4. Training & Development	Workshops, scientific reading, continual learning	Lifelong learning
5. Career Advancement & Mentorship	Mentorship, feedback, collaborative growth	Leadership & ethical practice
6. Expert Advice	Open-mindedness, confidence, risk-taking	Global mindset & career flexibility

10. Conclusion

The reflections of Dr. Eva Tvrdá and Dr. Filip Benko offer concrete, practical wisdom that can deeply enrich the AGROBIOTECH+ Handbook. Their emphasis on continuous learning, proactive networking, and self-awareness aligns perfectly with the project's mission to prepare students for a fast-changing biotechnology landscape.

Their stories should be integrated as case studies or expert profiles, with key takeaways and reflection questions to foster critical thinking and professional development among learners.