



EWRS

# SECOND CIRCULAR

## Weed Genomics Training Course and Workshop

2–5 November 2026 | Czech University of Life Sciences Prague (CZU), Czech Republic

### Welcome

We look forward to welcoming you to Prague for the EWRS Weed Genomics Training Course and Workshop. The programme combines scientific presentations and discussion with practical training in weed genomics and bioinformatics, with a focus on herbicide resistance.

### Important information

Please note that all participants are required to bring their **own laptops** for the practical sessions.

Each presentation will last **20 minutes**, followed by a discussion at the end of the respective session.

Posters will be displayed **on poster boards** on the 5th floor in Pavilion D – MCEV II. The maximum poster size is 85 × 115 cm (portrait orientation).

Contact persons: Kateřina Hamouzová – 00420-721 279 438, Pavlína Košnarová – 00420-724 276 940

### Programme at a glance

#### Sunday, 1 November – Welcome reception

Welcome reception - 18:00-21:00

#### Monday, 2 November – Workshop opening and research exchange

Welcome and introduction; presentations on herbicide-resistance evolution modelling, resistance monitoring and molecular characterisation, and genomic adaptation. The day also includes a campus Food Pavilion visit, poster session and discussion.

#### Tuesday, 3 November – Genomics approaches and discussion

Presentations on sequencing, haplotype-resolved gene analysis, biomonitoring and transcriptional responses, followed by a session on functional genomics and metabolic herbicide resistance. An excursion and dinner are planned for the evening.

#### Wednesday, 4 November – Weed Genomics Training Course

Practical sessions with Eric Patterson and Yeong Shin, including AI-driven bioinformatics with Pipette.bio, target-site resistance genomics, SNP analysis and gene copy-number analysis. A visit to the greenhouses and experimental fields is included in the programme.

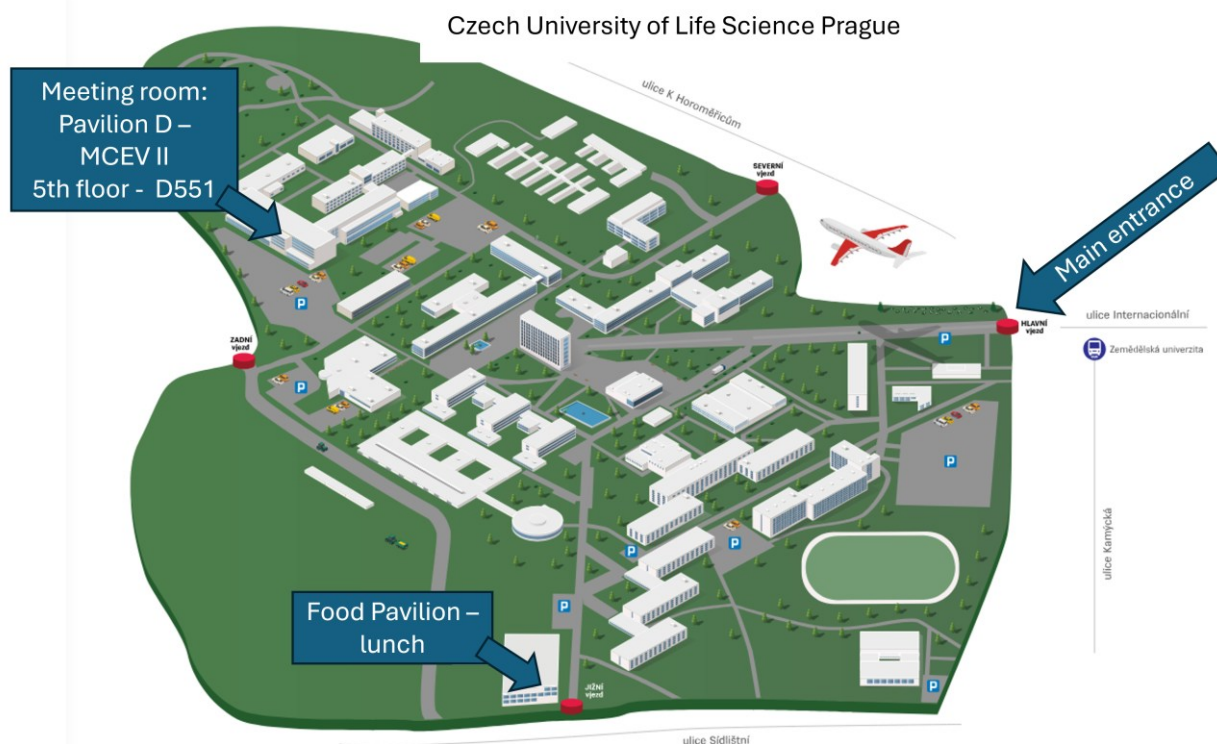
#### Thursday, 5 November – Transcriptomics and applied analysis

Sessions on transcriptomics and non-target-site resistance, candidate genes associated with metabolic resistance, complex resistance cases and long-read sequencing. The course concludes with a hands-on herbicide-resistance dataset challenge and certificates.

## Venue and practical information

|                             |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Main venue</b>           | <b>Czech University of Life Sciences Prague, Kamýcká 129, Prague 6,<br/>Pavilion D – MCEV II, 5th floor, room D551</b> |
| <b>Lunch</b>                | Food Pavilion, basement                                                                                                |
| <b>Welcome drink</b>        | Sunday, 1 November, 18:00–21:00, Pavilion D – MCEV II, 5th floor, D551                                                 |
| <b>Excursion and dinner</b> | Tuesday, 3 November, 17:30–21:00, Restaurace U Fleků, Křemencova 11, Prague 1                                          |
| <b>Posters</b>              | Poster session on Monday, 2 November. Poster presenters are kindly asked to be available for discussion.               |

## Meeting room and campus map



Campus overview



CZU campus map

## Final programme with the detailed schedule and session times.

| Weed Genomics Training Course and Workshop |             |                              |                                                                                                               |                                                                                                                                                                        |                        |                         |
|--------------------------------------------|-------------|------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|
| Date                                       | Time        | Type / section               | Presented by                                                                                                  | Presentation title                                                                                                                                                     | Notes/place            |                         |
| 01.11.2026                                 | 18:00-21:00 | Welcome Drink                |                                                                                                               |                                                                                                                                                                        | MCEV - 5th floor, D551 |                         |
| 2nd November 2026                          |             |                              |                                                                                                               |                                                                                                                                                                        |                        |                         |
| 2.11.2026                                  | 09:00–09:15 | Welcome                      | Josef Soukup                                                                                                  |                                                                                                                                                                        | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 09:15–09:30 | Organization                 | Kateřina Hamouzová                                                                                            |                                                                                                                                                                        | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 09:30–09:50 | Presentation                 | Roland Beffa                                                                                                  | How Genomics Can Contribute to Improve Herbicide Resistance Evolution Modelling Prediction in the Fields                                                               | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 09:50–10:00 | Discussion                   |                                                                                                               |                                                                                                                                                                        | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 10:00–10:15 | Coffee Break                 |                                                                                                               |                                                                                                                                                                        |                        |                         |
| 2.11.2026                                  | 10:15–10:35 | Presentation                 | Barbora Navrátilová, Kateřina Hamouzová, Pavlína Košnarová, Josef Soukup, Miroslav Jursík, Soham Bhattacharya | Herbicide Resistance Mapping in the Czech Republic: From Field Reports to Molecular Characterisation                                                                   | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 10:35–10:55 | Presentation                 | Hüsrev Mennan, Okan Guzel                                                                                     | Can Provisia® Solve Herbicide Resistance Problems in Rice Fields? Lessons from the First Experience in Turkey                                                          | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 10:55–11:15 | Presentation                 | Lalit Laxman Kharbikar, Anil Dixit, Pankaj Sharma, Pramod Kumar Rai                                           | From Herbicide Response to Genomic Adaptation: Integrating Herbicide Resistance Phenotypes and Stress-Associated Variation in Parthenium hysterophorus and Other Weeds | MCEV - 5th floor, D551 |                         |
| 2.11.2026                                  | 11:15–12:15 | Discussion                   |                                                                                                               |                                                                                                                                                                        |                        |                         |
| 2.11.2026                                  | 12:30–13:30 | Lunch                        |                                                                                                               |                                                                                                                                                                        |                        | Food Pavilion, basement |
| 2.11.2026                                  | 13:30–14:30 | Food Pavilion Excursion      |                                                                                                               |                                                                                                                                                                        |                        | Food Pavilion, basement |
| 2.11.2026                                  | 15:00–16:30 | Poster session               |                                                                                                               |                                                                                                                                                                        |                        |                         |
| 2.11.2026                                  | 14:30–14:45 | Coffee Break                 |                                                                                                               |                                                                                                                                                                        |                        |                         |
| 2.11.2026                                  | 16:30–17:00 | Discussion + wrap up 1st day |                                                                                                               |                                                                                                                                                                        |                        |                         |

| 3rd November 2026 |              |                              |                                                                                                                                  |                                                                                                                                    |                                                                                  |
|-------------------|--------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 3.11.2026         | 09:00–09:20  | Presentation                 | Ulrich Lutz, Travis Wrightsman, Katherine Zulak                                                                                  | Enabling Nanopore duplex sequencing for cost-efficient and accurate haplotype-resolved gene analysis of pooled weed samples        | MCEV - 5th floor, D551                                                           |
| 3.11.2026         | 09:20–09:40  | Presentation                 | Elza Kaktiņa, Anete Boroduške, Nikole Krasnevskā, Jevgenija Nečajeva, Brandon T. Sinn                                            | Mining the Angiosperms353 Probe Set for Biomonitoring: a case study in <i>Apera spica-venti</i>                                    | MCEV - 5th floor, D551                                                           |
| 3.11.2026         | 9:40 - 10:00 | Discussion                   |                                                                                                                                  |                                                                                                                                    |                                                                                  |
| 3.11.2026         | 10:00–10:15  | Coffee Break                 |                                                                                                                                  |                                                                                                                                    |                                                                                  |
| 3.11.2026         | 10:15–10:35  | Presentation                 | Zahra Bitarafan, Melissa Hamner Magerøy, Rafael de Andrade Moral, Najmeh Salehan, Kristian Schmidt Nielsen, Christian Andreassen | Climate conditions reshape species-specific transcriptional responses to glyphosate                                                | MCEV - 5th floor, D551                                                           |
| 3.11.2026         | 10:35–10:55  | Presentation                 | Sushil Grewal, Debalina Saha                                                                                                     | Alternative pesticides for pre-emergence liverwort control in nursery container production                                         | MCEV - 5th floor, D551                                                           |
| 3.11.2026         | 10:55–11:15  | Presentation                 | Bahadır ŞİN, Mustafa Said BAYRAM, Zübeyde Filiz ARSLAN                                                                           | Preliminary Screening of <i>Amaranthus</i> Populations Collected from Potato-Growing Areas in Türkiye for Resistance to Metribuzin | MCEV - 5th floor, D551                                                           |
| 3.11.2026         | 11:15–12:15  | Discussion                   |                                                                                                                                  |                                                                                                                                    |                                                                                  |
| 3.11.2026         | 12:30–13:30  | Lunch                        |                                                                                                                                  |                                                                                                                                    | Food Pavilion, basement                                                          |
| 3.11.2026         | 13:30–13:50  | Presentation                 | Roland Beffa                                                                                                                     | Functional Genomic Approaches. Gene Function Analyses Involved in Metabolic Herbicide Resistance as an Example.                    | MCEV - 5th floor, D551                                                           |
| 3.11.2026         | 13:50–15:30  | Discussion + computer set-up |                                                                                                                                  |                                                                                                                                    |                                                                                  |
| 3.11.2026         | 13:50–15:30  | Coffee Break                 |                                                                                                                                  |                                                                                                                                    |                                                                                  |
| 3.11.2026         | 17:30–21:00  | Excursion + Dinner           |                                                                                                                                  |                                                                                                                                    | Restaurace u Fleků - PIVOVAR A RESTAURACE U FLEKŮ s.r.o., Křemencova 11, Praha 1 |

| 4th November 2026 |             |                                                                                     |                               |                                                              |                         |
|-------------------|-------------|-------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------|-------------------------|
| 4.11.2026         | 09:00–10:00 | Discussion                                                                          | Eric Patterson                | Using AI-tools to accelerate Bioinfomratrics                 | MCEV - 5th floor, D551  |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         | 10:00–10:15 | Coffee Break                                                                        |                               |                                                              |                         |
| 4.11.2026         | 10:15–12:30 | Workshop                                                                            | Eric Patterson and Yeong Shin | AI-Driven Bioinformatics with Pipette.bio                    | MCEV - 5th floor, D551  |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
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| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         | 12:30–13:30 | Lunch                                                                               |                               |                                                              | Food Pavilion, basement |
| 4.11.2026         | 13:30–14:30 | Visit to the greenhouses and experimental fields with herbicide resistance trials?? |                               |                                                              |                         |
| 4.11.2026         | 14:45–15:30 | Presentation                                                                        | Eric Patterson and Yeong Shin | Using genomics for target site resisatnce and simple traits  | MCEV - 5th floor, D551  |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         | 14:30–14:45 | Coffee Break                                                                        |                               |                                                              |                         |
| 4.11.2026         | 14:45–17:00 | Workshop                                                                            | Eric Patterson and Yeong Shin | Target-Site Resistance (TSR) Genomics & Copy Number Analysis | MCEV - 5th floor, D551  |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
| 4.11.2026         |             |                                                                                     |                               |                                                              |                         |
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| 5th November 2026 |             |              |                               |                                                           |                         |
|-------------------|-------------|--------------|-------------------------------|-----------------------------------------------------------|-------------------------|
| 5.11.2026         | 09:00–10:00 | Presentation | Eric Patterson                | Transcriptomics & Non-Target-Site Resistance (NTSR)       | MCEV - 5th floor, D551  |
| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         | 10:00–10:15 | Coffee Break |                               |                                                           |                         |
| 5.11.2026         | 10:15–12:15 | Workshop     | Eric Patterson and Yeong Shin | Transcriptomics & Non-Target-Site Resistance (NTSR)       | MCEV - 5th floor, D551  |
| 5.11.2026         |             |              |                               |                                                           |                         |
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| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         | 12:30–13:30 | Lunch        |                               |                                                           | Food Pavilion, basement |
| 5.11.2026         | 13:30–14:30 | Presentation | Eric Patterson                | Complex Cases of Resistance and Bioinformatic Application | MCEV - 5th floor, D551  |
| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         | 14:30–14:45 | Coffee Break |                               |                                                           |                         |
| 5.11.2026         | 14:45–16:00 | Workshop     | Eric Patterson and Yeong Shin | Hands-On Capstone: Herbicide Resistance Dataset Challenge | MCEV - 5th floor, D551  |
| 5.11.2026         |             |              |                               |                                                           |                         |
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| 5.11.2026         |             |              |                               |                                                           |                         |
| 5.11.2026         | 16:00–16:15 | Ceremony     |                               |                                                           |                         |
| 5.11.2026         | 16:15–17:00 | Wrap up      |                               |                                                           |                         |