

Europass Curriculum Vitae



Abbreviated name of the organization

SZBK (hu) BRC (en)

Personal information

First name / Surname

Rui Lima

Address

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Nationality

Hungarian

Date of birth

03.02.1985

Gender

Male

Work experience

Date

2012 – present

Occupation or position held

Postdoctoral Fellow

Research area

Symbiotic nitrogen fixation in *Medicago truncatula*

Name and address of employer

Institute of Plant Biology, Biological Research Centre, Szeged, ELKH

Type of business or sector

Government

Education

Date

2012 – 2023

Qualification

PhD

Organisation

SZTE TTIK University, Szeged, Hungary

Language skills

Hungarian

Mother tongue

English

Intermediate level

Spanish

Basic level

Field of interest

The nature is full with unexplored molecules that might be useful for humankind. During nitrogen-fixing symbiosis thousands of plant species are producing hundreds of thousands of bioactive compounds which are regulating the lifecycle and metabolism of the symbiont and thus can be used as antibacterial or antifungal agent against multidrug-resistant human pathogens.

Publications

Number of scientific publications: 7

Number of citations: 316

Hirsch index: 5

Rui M. Lima, Balaji Baburao Rathod, Hilda Tiricz, Dian H. O. Howan, Mohamad Anas Al Bouni, Sándor Jenei, Edit Tímár, Gabriella Endre, Gábor K. Tóth and Éva Kondorosi (2022) Legume plant peptides as sources of novel antimicrobial molecules against human pathogens. *Frontiers in Molecular Biosciences*, vol. 9, doi:10.3389/fmolb.2022.870460

Rui M. Lima, Salome Kylarová, Peter Mergaert, Éva Kondorosi (2020) Unexplored arsenals of legume peptides with potential for their applications in medicine and agriculture. *Frontiers in Microbiology*, vol. 11, doi:10.3389/fmicb.2020.01307

Senlei Zhang, Ting Wang, Rui M. Lima, Aladár Pettkó-Szandtner, Attila Kereszt, J. Allan Downie, Éva Kondorosi (2023) Widely conserved AHL transcription factors are essential for NCR gene expression and nodule development in *Medicago*. *Nature Plants*, doi: 10.1038/s41477-022-01326-4

Sándor Jenei, Hilda Tiricz, János Szolomájer, Edit Tímár, Éva Klement, Mohamad Anas Al Bouni, Rui M Lima, Diána Kata, Mária Harmati, Krisztina Buzás, Imre Földesi, Gábor K Tóth, Gabriella Endre, Éva Kondorosi (2020) Potent chimeric antimicrobial derivatives of the *Medicago truncatula* NCR247 symbiotic peptide. *Frontiers in Microbiology*, vol. 11, doi:10.3389/fmicb.2020.00270

Attila Farkas, Gergely Maróti, Hajnalka Dürgő, Zoltán Györgypál, Rui M. Lima, Katalin Folkl-Medzihradzky, Attila Keresz, Peter Mergaert, and Éva Kondorosi (2014) *Medicago truncatula* symbiotic peptide NCR247 contributes to bacteroid differentiation through multiple mechanisms. *PNAS*, vol. 111, no. 14, 5183-5188, doi:10.1073/pnas.1404169111

Hilda Tiricz, Attila Szűcs, Attila Farkas, Bernadett Pap, Rui M. Lima, Gergely Maróti, Éva Kondorosi, Attila Kereszt (2013) Antimicrobial nodule-specific cysteine-rich peptides induce membrane depolarization-associated changes in the transcriptome of *Sinorhizobium meliloti*. *Applied and Environmental Microbiology*, vol. 79, no. 21, 6737-6746, doi:10.1128/AEM.01791-13

Emil Nyerki, Tibor Kalmár, Oszkár Schütz, Rui M. Lima, Endre Neparáczi, Tibor Török & Zoltán Maróti (2023) correctKin: an optimized method to infer relatedness up to the 4th degree from low-coverage ancient human genomes. *BMC Genome Biology*, doi: 10.1186/s13059-023-02882-4