


Dr. rer. nat.

LUCIA CIGLAR


Molecular Biologist and Science Communicator

Dedicated scientist with a doctor's degree from European Molecular Biology Laboratory (EMBL) Heidelberg, Germany and more than 10 years of research experience. Specialized in functional genomics, *D. melanogaster* embryogenesis and genetic engineering. Skilled in communicating science to lay audience and children. Proficient at data visualization and scientific infographics.

 Prešov, Slovakia/EU

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 luciaciglar.com

WORK EXPERIENCE

Science Visualization, Communication and Education

Freelancer | 01/2018 - now

- Run a social media project @kreslim_vedu (*I draw science*) to promote science and evidence-based medicine.
- Create scientific figures for academic and commercial clients to help them visually communicate their research (EMBL, Cord Blood Center, Komunikace 21 and others).
- Provide consulting services to life science companies and start-ups.
- Deliver lectures on topics related to science, science visualization and career in science.
- Popularize science through interviews in media (TV, podcasts, newspapers).
- Introduce molecular biology to primary and secondary school students with a self-made program and activities.
- Design soft skills courses on scientific literacy aimed at children and adults.

Scientific Assistant in Furlong Group

EMBL Heidelberg | 11/2011 - 11/2017

- Designed, conducted and analysed experiments.
- Supervised students and co-organized training courses.
- General lab management and maintenance.

EDUCATION

PhD in Molecular Biology

EMBL Heidelberg & University Heidelberg | 08/2006 - 07/2011

- Performed a genome-wide *in vivo* screen to identify novel transcription factors involved in muscle development.
- Combined ChIP-on-chip and genetics to reveal a new role of transcriptional repressor Ttk69 in *Drosophila* myogenesis.
- Collaborated with the groups of M. Leptin and A. Stark to discover that the repressor Snail can activate transcription.
- Co-authored a review on gene regulatory networks and their conservation across different species.

BSc. in Biochemistry and Cell Biology

Jacobs University Bremen | 08/2003 - 08/2006

Graduated with the honors of President's list.

International Baccalaureate Diploma Program

Gymnázium Jura Hronca Bratislava | 09/2001 - 06/2003

Scored 41/45 points at the final international exams.

PUBLICATIONS

Zolotarev N, Maksimenko O, Kyrchanova O, Sokolinskaya E, Osadchij I, Girardot C, Bonchuk A, [Ciglar L](#), Furlong EEM, Georgiev P. (2017) Opbp is a new architectural/insulator protein required for ribosomal gene expression. *Nucleic Acids Research* 45 (21).

Khoueiry P, Girardot C, [Ciglar L](#), Peng PC, Gustafson EH, Sinha S, Furlong EE. (2017) Uncoupling evolutionary changes in DNA sequence, transcription factor occupancy and enhancer activity. *Elife*.

Cannavò E, Koelling N, Harnett D, Garfield D, Casale FP, [Ciglar L](#), Gustafson HE, Viales RR, Marco-Ferreres R, Degner JF, Zhao B, Stegle O, Birney E, Furlong EE. (2017) Genetic variants regulating expression levels and isoform diversity during embryogenesis. *Nature* 541 (7637).

Mbodj A, Gustafson EH, [Ciglar L](#), Junion G, Gonzalez A, Girardot C, Perrin L, Furlong EE, Thieffry D. (2016) Qualitative dynamical modelling can formally explain mesoderm specification and predict novel developmental phenotypes. *PLoS Computational Biology* 12 (9).

Cannavò E, Khoueiry P, Garfield DA, Geeleher P, Zichner T, Gustafson EH, [Ciglar L](#), Korbel JO, Furlong EE. (2016) Shadow enhancers are pervasive features of developmental regulatory networks. *Current Biology* 26 (1).

Ghavi-Helm Y, Klein FA, Pakozdi T, [Ciglar L](#), Noordermeer D, Huber W, Furlong EE. (2014) Enhancer loops appear stable during development and are associated with paused polymerase. *Nature* 512 (7512).

[Ciglar L](#), Girardot C, Wilczyński B, Braun M, Furlong EE. (2014) Coordinated repression and activation of two transcriptional programs stabilizes cell fate during myogenesis. *Development* 141 (13).

Rembold M*, [Ciglar L](#)*, Yanez-Cuna JO, Zinzen RP, Girardot C, Jain A, Welte MA, Stark A, Leptin M, Furlong EE. (2014) A conserved role for Snail as a potentiator of active transcription. *Genes & Development* 28 (2).

Cunha PM, Sandmann T, Gustafson EH, [Ciglar L](#), Eichenlaub MP, Furlong EE. (2010) Combinatorial binding leads to diverse regulatory responses: Lmd is a tissue-specific modulator of Mef2 activity. *PLoS Genetics* 6 (7).

[Ciglar L](#) and Furlong EE. (2009) Conservation and divergence in developmental networks: a view from *Drosophila* myogenesis. *Current Opinion in Cell Biology* 21 (6).

INVITED PRESENTATIONS

- Discussion: Science popularization literature
Slovak Centre of Scientific and Technical Information,
Košice | 03/2022
- Lecture: Creative career in science visualization
EMBL Career Webinar, online | 03/2022
- Lecture: Behind the scenes of science
Rotary Czechia & Slovakia, online | 02/2022
- Discussion: Working with facts in the post-factual era
University of Ss. Cyril and Methodius, Trnava | 11/2021
- Lecture: How to create science popularizing graphics
Slovak Centre of Scientific and Technical Information,
Bratislava | 11/2021
- Lecture: Importance of pictures in science popularization
Workshop on Science Popularization, Prague | 09/2021

VOLUNTEERING ACTIVITIES

Current

- Mentor in Lady Up mentoring program for university students.
- Collaboration with COVID-19 PreMatOut initiative to analyze impact of COVID-19 on pregnancy outcomes.
- Current president of Rotary Club Prešov-Šariš (administration, organization of beneficiary events).

Past

- Member of organizational committee of EMBL PhD Symposium.
- School Ambassador of Set-Routes Programme, an initiative by EMBL, EMBO, and CERN to mobilize women to pursue careers in science.
- Involved in the activities of European Learning Laboratory for the Life Sciences (ELLS).
- Translator for *Science in School* magazine.

RESEARCH INTERNSHIPS

Supervisors: David Rubinsztein and Cahir O'Kane
CIMR & University of Cambridge, UK | 06 - 08/2005
RNAi screen for Huntington's disease modifiers.

Supervisor: Gabriela Bukovská
Institute of Molecular Biology, SAV Bratislava | 06 - 07/2004
Molecular methods in early detection of pancreatic carcinoma.

TEACHING EXPERIENCE

EMBO Practical Course *Genomic approaches to evolution and development*
EMBO Heidelberg | 02/2010

Teaching Assistant for General Biochemistry and Cell Biology Courses and Lab Courses
Jacobs University Bremen | 09/2005 - 05/2006

HONORS AND ACHIEVEMENTS

- PhD. Fellowship, Fondation Louis-Jeantet de médecine
08/2006 – 07/2010
- Attendance of 18th Lindau Meeting of Nobel Laureates in Chemistry
06/2006
- Achievement in Biosciences Prize, Oxford University Press
05/2006
- Fellowship, Studienstiftung des deutschen Volkes
01/2005 - 06/2006
- Scholarship, Zonta International Bremen
06/2004

LANGUAGES

Slovak native
English fluent
German advanced

COMPUTER SKILLS

MS Office advanced
Adobe Illustrator advanced
Adobe Photoshop advanced

REFERENCES

Eileen Furlong
Head of unit and senior scientist, EMBL Heidelberg
e-mail: furlong@embl.de

Maria Leptin
President, ERC
e-mail: mleptin@uni-koeln.de

Yad Ghavi-Helm
Group leader, IGFL Lyon
e-mail: yad.ghavi-helm@ens-lyon.fr