Lyuba Bozhilova

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Education

2015–2020	**Doctor of Philosophy**, *University of Oxford*, Oxford. Systems Approaches to Biomedical Science CDT Department of Statistics
2011–2015	**MMath Mathematics and Statistics**, *University of Oxford*, Oxford. Worcester College
2006–2011	**High School Diploma**, *Sofia High School of Mathematics*, Sofia.

Research experience

Aug 2020–	**Associate**, *Relation Therapeutics*, Bioinformatics. Data science. Robustness in knowledge graph analysis.
Jul-Sep 2019	**Intern**, *BenevolentAI*, Biomedical Informatics. Generation and analysis of tissue-specific networks.
2016–2020	**Doctoral student**, *University of Oxford*, Department of Statistics, Professor Gesine Reinert, Professor Charlotte Deane. Confidence in protein interaction networks. Collaboration with e-Therapeutics plc.
Jul-Oct 2016	**Short project**, *University of Oxford*, Institute of Biomedical Engineering, Professor Maarten De Vos, Dr Thanasis Tsanas. Machine learning for Parkinson's disease remote patient monitoring. Collaboration with F. Hoffmann-La Roche AG.
Apr-Jun 2016	**Short project**, *University of Oxford*, Department of Statistics, Professor Gesine Reinert, Professor Charlotte Deane. Confidence in protein interaction networks. Collaboration with e-Therapeutics plc.
2015	**Part C dissertation**, *University of Oxford*, Department of Statistics, Professor Louigi Addario-Berry. Uniform spanning trees.
Mar-Apr 2014	**Research assistant**, *National Heart Hospital of Bulgaria*, Dr Evelina Doncheva. Analysing drug response in post-surgery Acenocoumarol therapy.

Publications

Peer-reviewed

[1] **Bozhilova, L. V.**, Whitmore, A. V., Wray, J., Reinert, G., & Deane, C. M. (2019). Measuring rank robustness in scored protein interaction networks. BMC Bioinformatics, 20(1), 1-14.

Preprints

[2] **Bozhilova, L. V.**, Pardo–Diaz, J., Reinert, G., & Deane, C. M. (2020). COGENT: evaluating the consistency of gene co-expression networks. *bioRxiv*. [In review]. Software: `https://github.com/lbozhilova/COGENT`.

[3] Pardo–Diaz, J., **Bozhilova, L. V.**, Beguerisse–Diaz, M., Poole, P. S., Deane, C. M. & Reinert, G. (2020) Robust gene coexpression networks using signed distance correlation. *bioRxiv*. [In review].

Teaching experience

Department of Statistics, University of Oxford

2016–2019 **Tutor, TA**, Probability and Statistics for Network Analysis. Simulation and Statistical Programming.

2018 **Short project co-supervisor**.
Supervised a graduate student for a 10-week research project with Professor Charlotte Deane and Professor Gesine Reinert.
Community detection in uncertain networks.

Mansfield College, University of Oxford

2018–2019 **Tutor**, Probability and Statistics for Network Analysis. Probability. Differential Equations.

Oxford Internet Institute, University of Oxford

2018–2019 **Teaching assistant**, Statistical Analysis of Networks.

St Edmund's Hall, University of Oxford

2017 **Tutor**, Probability and Statistics for Network Analysis.

d'Overbroeck's College

2014 **Teaching assistant**, *Undergraduate Ambassador Scheme*.
Mathematics and statistics.

Conferences and talks

Jul 2019 Poster and Ignite talk, ISMB/ECCB 2019, Basel

Oct 2018 Seminar talk, Network seminar, Mathematical Institute, Oxford

Sep 2018 Short talk, COSTNET18, Warsaw

Oct 2017 Poster, COSTNET17, Palma

Mar 2017 Poster, SEMSTAT: Statistical Network Science, Eindhoven

Mar 2017 Poster, 2nd QBIOX Colloquium, Oxford

Outreach

2018–2019 Oxford Maths Festival

Oct 2018 Graduate open day, Department of Statistics, Oxford

Jul 2015 Undergraduate open day, Mathematical Institute, Oxford

Awards

2015–2019	Full studentship for EU students, EPSRC
2013	Scholarship for academic excellence, Worcester College, Oxford

Languages

Bulgarian	**Native**
English	**Fluent**
German	**Basic**