KASIA KEDZIERSKA

I am a 2nd year DPhil Candidate at the University of Oxford, studying the chromatin organisation in endometrial cancer. As a bioifnormatician, I spend most of my time either in command line writing Bash/Awk scripts or doing data analysis in R/Python.

I like teaching and deeply believe in Open Science. I am the President of #NGSchool Society with which I've been organising Summer Schoools in Bioinformatics. During last year edition - #NGSchool2019: Machine Learning for Biomedicine we recorded and published some of the lectures. This year, during #NGSchool2020: Statistical Learning in Genomics and NGSymposium in Computational Biology we plan to record many more.

RESEARCH EXPERIENCE

DPhil Candidate

2022

2018

2018

2017

2017

2016

2016

2015

Church group @ Wellcome Centre for Human Genetics, Wedge group @ Big Data Institute

Ouniversity of Oxford, UK

• PhD project: Functional and evolutionary characterisation of chromatin organisation in endometrial cancer

Visiting Graduate Student

Ratan group

Q University of Virginia, USA

- Developed SONiCS a tool for genotyping short tandem repeats (STRs) profiled using capture assays.
- · Worked on the Master thesis Analysis of the mutational burden across gene sets in cancer.

Visiting Graduate Student

Pemberton group

University of Virginia, USA

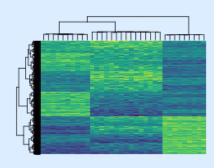
- · Worked on Epigenetic regulation in prostate cancer.
- Performed experiments and analyzed data from RNA-seq, ATAC-seq, and ChIP-seq assays.

Research Assistant

Zebrafish Developmental Genomics

♥ IIMCB, Warsaw, Poland

- · I worked on the project: Elucidating gene regulatory network of zebrafish heart development using genomics.
- · I was responsible for both computational and experimental aspects of the project.



View this CV online with links at kasia.codes/cv/

CONTACT

- kasia@well.ox.ac.uk
- kzkedzierska
- github.com/kzkedzierska
- kasia.codes
- in kzkedzierska

LANGUAGE SKILLS

R	
Bash	
Pythor	1
AWK	
SQL	
Perl	

Made with the R package pagedown.

Based on the Nick Strayer's CV package; modified source code for this CV is available here.

Last updated on 2020-02-23.

EDUCATION DPhil. Candidate, Genomic Medicine and Statistics 2022 Nuffield Department of Medicine, Brasenose College 2018 • University of Oxford, UK · Project: Functional and evolutionary characterisation of chromatin organisation in endometrial cancer. · Wellcome Trust Studentship M. Sc. Eng., Biotechnology 2018 • Warsaw, Poland Warsaw University of Technology 2015 • Thesis: Analysis of the mutational burden across gene sets in cancer. · Thesis awarded the title of the best Master thesis in Bioinformatics defended in 2018. B. Sc. Eng., Biotechnology 2015 • Warsaw, Poland Warsaw University of Technology 2011 **PUBLICATIONS** Dynamics of cardiomyocyte transcriptome and chromatin landscape 2019 demarcates key events of heart development Genome Research · Regulation networks in heart developmment in zebrafish. Genomic analysis of DNA repair genes and androgen signaling in 2018 prostate cancer **BMC Cancer** · DNA repair genes and androgen signalling in prostate cancer cell lines. SONICS: PCR stutter noise correction in genome-scale microsatellites 2018 **Bioinformatics** · Tool for genotyping short tandem repeats (STRs) profiled using capture assays, github.com/kzkedzierska/sonics POSTERS, AND TALKS Analysis of the mutational burden across gene sets in cancer 2019 Oracow, Poland Polish Bioinformatics Society Symposium · Invited talk Differential mutation analysis across gene sets in cancers 2018 **Q** Cold Spring Harbor, NY, USA The Biology of Genomes 2018 Poster

2017

Epigenetic regulation of prostate cancer

Visiting Graduate Traineeship Program Grantees Symposium

◆ Charlottesville, VA, USA

· Talk



AWARDS AND HONOURS

2019 | 2018

Best Master Thesis in Bioinformatics

- The Best Master Thesis defended in 2018 in Poland.
- · Analysis of the mutational burden across gene sets in cancer Masther thesis defended at the Warsaw University of Technology; code for the analyses can be accessed github.com/kzkedzierska/cancers

2017 | 2016

Visiting Graduate Traineeship Program

• The Visiting Research Graduate Traineeship Program offered 12-month research traineeships for outstanding, qualified students from the life sciences at selected institutions in the United States.

2015

Grasz o Staz

• "Grasz o Staz" competition was a national, prestigious and highly competitive (1:25 success rate) scholarship program in Poland organized by PwC.



TEACHING EXPERIENCE

2019

Unsupervised learning, Introduction to Python

#NGSchool2019: Machine Learning for Biomedicine

- Tutor for the Introduction to Python (3 h workshop) and for the Unsupervised learning (1,5 h lecture).
- · Materials for the Introduction to Python are available on github

2019

Introduction to R

Wellcome Centre for Human Genetics

- · 8 week course in Introduction to R, Data Manipulation, Data Visualisation and RNA-seq data analysis.
- · Materials available on github/kzkedziersa/r_intro

2017

ATAC-seq workshop

#NGSchool2017: Single-cell Sequencing

- · Invited speaker
- · Materials for the course can be available on gitub.com/kzkedzierska/ATACseq_workshop



ATTENDED WORKSHOPS, SUMMER SCHOOLS

2019

Machine Learning Summer School

Imperial College London, University College London

Q London, United Kingdom

· 12-day intensive course on a variety of topics in machine learning.



GRANTS

2019

Visegrad Grant to organize #NGSchool2019

Visegrad Fund

· 23,500 EUR awarded towards organising #NGSchool2019 allowed to keep the cost of attenting the school to the minimum and record the lectures for broader access.



NON PROFIT WORK

2021 2018

President

NGSchool Society

- The goal of the Society is to promote and support science, with emphasis on computational biology.
- · President since 2019; Vice President 2018 2019

2016

2015

President

Warsaw Society of Biotechnology

· Symbioza's aim is to integrate biotechnology community in Poland starting from the youngest generations, and promotion and popularization of biotechnology.