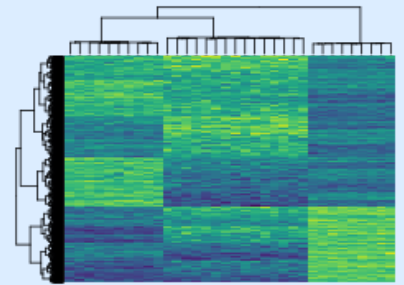


KASIA KEDZIERSKA

I am a 3rd year PhD student at the University of Oxford. I am a computational biologist, i.e. I use Data Science and Statistical Machine Learning while answering biological questions related to cancer of the uterus. Specifically, I study chromatin organisation in endometrial cancer. I spend most of my time either in command line writing Bash/Awk scripts or analysing and visualising data 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 Schools in Bioinformatics. During last year edition - [#NGSchool2019: Machine Learning for Biomedicine](#) we recorded and published some of the lectures. This year, because of the pandemic we switched to organising virtual events, like [NGSseminars series](#).



[Download a PDF of this CV](#)

RESEARCH EXPERIENCE

2022
|
2018

DPhil Candidate

Church group @ Wellcome Centre for Human Genetics, [Wedge group](#) @ [Big Data Institute](#)

📍 University of Oxford, UK

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

2018
|
2017

Visiting Graduate Student

[Ratan](#) group

📍 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*.

2017
|
2016

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.

2016
|
2015

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.

CONTACT

✉ kasia@well.ox.ac.uk

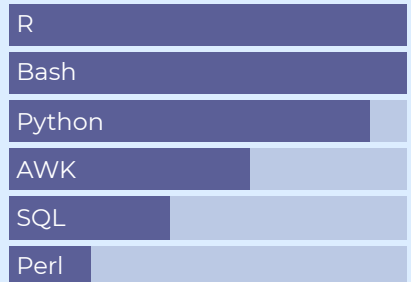
🐦 [kzkedzierska](#)

🔗 github.com/kzkedzierska

🔗 [kasia.codes](#)

in [kzkedzierska](#)

LANGUAGE SKILLS



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 2020-11-09.



EDUCATION

2022
|
2018

DPhil. Candidate, Genomic Medicine and Statistics

Nuffield Department of Medicine, Brasenose College

📍 University of Oxford, UK

- Project: *Functional and evolutionary characterisation of chromatin organisation in endometrial cancer.*
- Wellcome Trust Studentship

2018
|
2015

M. Sc. Eng., Biotechnology

Warsaw University of Technology

📍 Warsaw, Poland

- Thesis: *Analysis of the mutational burden across gene sets in cancer.*
- Thesis awarded the best Master thesis in Bioinformatics defended in 2018 title.

2015
|
2011

B. Sc. Eng., Biotechnology

Warsaw University of Technology

📍 Warsaw, Poland



PUBLICATIONS

2020

The *MLH1* polymorphism rs1800734 and risk of endometrial cancer with microsatellite instability

- *MLH1* promoter polymorphism, rs1800734, association with MSI EC risk.

2020

Prognostic integrated image-based immune and molecular profiling in early-stage Endometrial Cancer

- Quantification of intraepithelial CD8+ cells improved upon the prognostic utility of the molecular EC classification in early-stage EC

2019

Dynamics of cardiomyocyte transcriptome and chromatin landscape demarcates key events of heart development

Genome Research

- Regulation networks in heart development in zebrafish.

2018

Genomic analysis of DNA repair genes and androgen signaling in prostate cancer

BMC Cancer

- DNA repair genes and androgen signalling in prostate cancer cell lines.

2018

SONICS: PCR stutter noise correction in genome-scale microsatellites

Bioinformatics

- Tool for genotyping short tandem repeats (STRs) profiled using capture assays, github.com/kzkezdziarska/sonics



POSTERS, AND TALKS

- 2019 • **Analysis of the mutational burden across gene sets in cancer**
Polish Bioinformatics Society Symposium Cracow, Poland
• Invited talk
- 2018 • **Differential mutation analysis across gene sets in cancers**
The Biology of Genomes 2018 Cold Spring Harbor, NY, USA
• 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 the field of Bioinformatics in 2018 in Poland.
• *Analysis of the mutational burden across gene sets in cancer* Master thesis defended at the Warsaw University of Technology; code for the analyses can be accessed github.com/kzkezdziarska/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

- 2020 • **Online tutorials: Python for Data Science and Introduction to Python**
[NGSeminars](#)
• I led two Python tutorials: [Introduction to Python](#) [kasia.codes/talk/intro_to_python/](#) and [Python for Data Science](#) [kasia.codes/talk/py4ds/](#).

2020
|
2019

● **Introduction to Managing Code with Git**

Wellcome Centre for Human Genetics

- I led a 2-hour introduction to working with Git. The session aims at highlighting the advantages of working with Git as well as providing participants knowledge how to use Git.

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/kzkdziarsa/r_intro](#)

2017

● **ATAC-seq workshop**

[#NGSchool2017: Single-cell Sequencing](#)

- Invited speaker
- Materials for the course can be available on [gitub.com/kzkdziarska/ATACseq_workshop](#)



ATTENDED WORKSHOPS, SUMMER SCHOOLS

2019

● **Machine Learning Summer School**

Imperial College London, University College Londn

📍 London, United Kingdom

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



GRANTS

2021
|
2020

● **Visegrad Grant to organize [#NGSchool2020](#) - postponed until 2021**

- A platform to share expertise in the field of Next Generation Sequencing data analysis and general bioinformatics.

2019

● **Visegrad Grant to organize [#NGSchool2019](#)**

[Visegrad Fund](#)

- 23,500 EUR awarded towards organising [#NGSchool2019](#) allowed to keep the cost of attending 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