

# KASIA KEDZIERSKA

I am a 2nd year DPhil Candidate at the University of Oxford, studying the chromatin organisation in endometrial cancer. As a bioinformatician, 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 Schools 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 [5 year anniversary conference](#) we plan to record many more.

## 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.

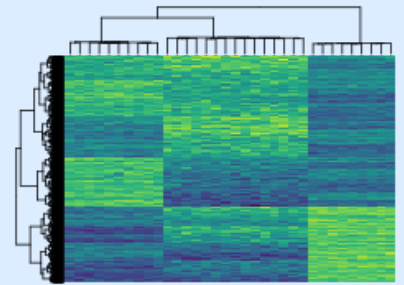
2016  
|  
2015

### 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.



View this CV online with links at [kasia.codes/cv/](https://kasia.codes/cv/)

## CONTACT

✉ [kasia@well.ox.ac.uk](mailto:kasia@well.ox.ac.uk)

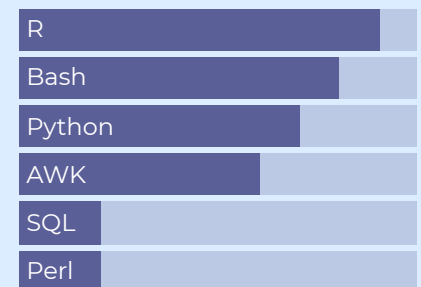
🐦 [kzkedzierska](https://twitter.com/kzkedzierska)

📄 [github.com/kzkedzierska](https://github.com/kzkedzierska)

🔗 [kasia.codes](https://kasia.codes)

in [kzkedzierska](https://www.linkedin.com/company/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 2020-02-16.



## EDUCATION

2022  
|  
2018

### DPhil. Candidate, Genomic Medicine and Statistics

Nuffield Department of Medicine, [Brasenose College](#)

📍 University of Oxford, UK

- 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 title of the best Master thesis in Bioinformatics defended in 2018.

2015  
|  
2011

### B. Sc. Eng., Biotechnology

Warsaw University of Technology

📍 Warsaw, Poland



## PUBLICATIONS

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/kzkeczerska/sonics](https://github.com/kzkeczerska/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 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/kzkedzierska/cancers](https://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 is 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](https://github.com/kzkedziersa/r_intro)

2017

### ATAC-seq workshop

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

- Invited speaker
- Materials for the course can be available on [gitub](#)



## 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

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

2016

|  
2015

### **President**

Warsaw Society of Biotechnology

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