

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 to answer biological questions. Specifically, I study cancer of the uterus and chromatin organisation in disease progression.



SELECTED RESEARCH EXPERIENCE

2022
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2018

● DPhil Candidate

Wedge group and Church group

📍 University of Oxford, UK

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

2018
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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*.

2016
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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.



EDUCATION

2022
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2018

● DPhil. Candidate, Genomic Medicine and Statistics

Nuffield Department of Medicine, Brasenose College

📍 University of Oxford, UK

- PhD fully funded by **Wellcome Trust Four-year PhD Studentships in Science**

2018
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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.



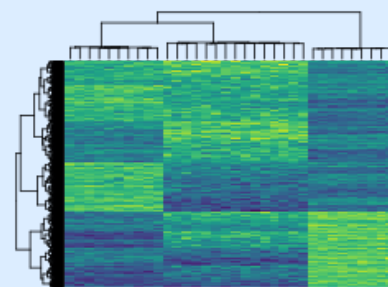
PUBLICATIONS

2020

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

H. Russell, **K. Kedzierska**, D. D. Buchanan, R. Thomas, E. Tham, M. Mints, A. Keränen, G. G. Giles, M. C. Southey, R. L. Milne, I. Tomlinson, D. Church, A. B. Spurdle, T. A. O'Mara and A. Lewis

📍 Clinical Epigenetics



View this CV online on kasia.codes/resume/

CONTACT

✉ kasia@well.ox.ac.uk

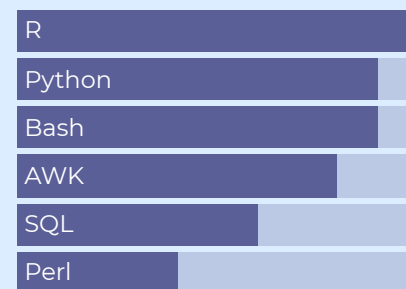
🐦 [kzkedzierska](https://twitter.com/kzkedzierska)

🐙 github.com/kzkedzierska

🔗 kasia.codes

in [kzkedzierska](https://www.linkedin.com/company/kzkedzierska)

CODING 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 2021-03-11.

- 2020 ● **Prognostic integrated image-based immune and molecular profiling in early-stage Endometrial Cancer**
N. Horeweg, M. de Bruyn, R. A. Nout, E. Stelloo, **K. Kedzierska**, A. León-Castillo, A. Plat, K. D. Mertz, M. Osse, I. M. Jürgenliemk-Schulz, L. C.H.W. Lutgens, J. J. Jobsen, E. M. van der Steen-Banasik, V. T. Smit, C. L. Creutzberg, T. Bosse, H. W. Nijman, V. H. Koelzer and D. N. Church
📍 Cancer Immunology Research
- 2019 ● **Dynamics of cardiomyocyte transcriptome and chromatin landscape demarcates key events of heart development**
M. Pawlak, **K. Z. Kedzierska**, M. Migdal, K. A. Nahia, J. A. Ramilowski, L. Bugajski, K. Hashimoto, A. Marconi, K. Piwocka, P. Carninci and C. L. Winata
📍 Genome Research
- 2018 ● **Genomic analysis of DNA repair genes and androgen signaling in prostate cancer**
K. Jividen, **K. Z. Kedzierska**, C.-S. Yang, K. Szlachta, A. Ratan and B. M. Paschal
📍 BMC Cancer
- 2018 ● **SONICS: PCR stutter noise correction in genome-scale microsatellites**
K. Z. Kedzierska, L. Gerber, D. Cagnazzi, M. Krützen, A. Ratan, L. Kistler
📍 Bioinformatics



SELECTED TALKS AND POSTERS

- 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



SELECTED AWARDS AND HONOURS

- 2022
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2021 ● **Senior Hulme Scholarship**
• Senior Hulme Scholarships is awarded by Brasenose College to DPhil students whose academic performance is deemed to be exceptional.
- 2019
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2018 ● **Best Master Thesis in Bioinformatics**
• *Analysis of the mutational burden across gene sets in cancer* - Best Master Thesis defended in Bioinformatics in 2018 in Poland.



ATTENDED WORKSHOPS, SUMMER SCHOOLS

2019



Machine Learning Summer School

Imperial College London, University College Londn

📍 London, United Kingdom



TEACHING EXPERIENCE

2020



Online tutorials: Python for Data Science and Introduction to Python

NGSeminars

📍 YouTube

- I led two Python tutorials: [Introduction to Python](https://kasia.codes/talk/intro_to_python/) [kasia.codes/talk/intro_to_python/](https://kasia.codes/talk/py4ds/) and [Python for Data Science](https://kasia.codes/talk/py4ds/) kasia.codes/talk/py4ds/.

2020

|
2019



Introduction to Managing Code with Git

Wellcome Centre for Human Genetics

📍 Oxford, United Kingdom

- I led a 2-hour introduction to working with Git. Materials, including slides and exercises are available at kasia.codes/talk/into_to_git/.

2019



Unsupervised learning, Introduction to Python

[#NGSchool2019: Machine Learning for Biomedicine](#) 📍 Ostróda, Poland

- 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

📍 Oxford, United Kingdom

- 8 week course in Introduction to R, Data Manipulation, Data Visualisation and RNA-seq data analysis.
- Materials available on [github/kzkdziarsa/r_intro](#)



SELECTED GRANTS

2021

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2020



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

[Visegrad Fund](#)

- 32,190 EUR awarded towards organising [#NGSchool2020](#) and [#NGSymposium](#). Both events are postponed until 2021.



NON-PROFIT WORK

2021

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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

I like teaching and deeply believe in Open Science. With [#NGSchool Society](#) which I'm the president of, I've been organising Summer Schools in Bioinformatics. During [#NGSchool2019: Machine Learning for Biomedicine](#) we recorded and published some of the lectures. Nowadays, because of the pandemic, we switched to organising virtual events - [NGSeminars series](#). We made all the content publicly available.