

# KASIA KEDZIERSKA

I am a 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. Currently, I joined Computational Biology Department at Novo Nordisk Research Centre in Oxford as an intern, where I am working with NLP methods and knowledge graphs.



## SELECTED RESEARCH EXPERIENCE

- 2021**
  - Intern**  
Novo Nordisk Research Centre Oxford 📍 Oxford, United Kingdom
    - I am applying NLP based methods to screen biomedical articles and identify potential therapeutic targets.
- present | 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 | 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 | 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

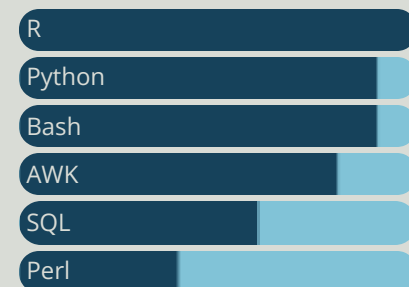
- present | 2018**
  - DPhil. Candidate, Genomic Medicine and Statistics**  
Nuffield Department of Medicine, Brasenose College 📍 University of Oxford, UK
    - PhD fully funded by Wellcome Trust Four-year PhD Studentships in Science
- 2018 | 2015**
  - M. Sc. Eng., Biotechnology**  
Warsaw University 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.

View this CV online on [kasia.codes/resume/](https://kasia.codes/resume/)

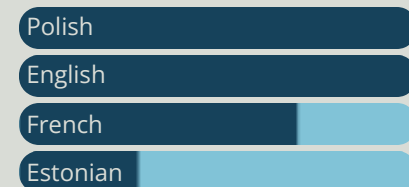
## CONTACT

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## CODING SKILLS



## LANGUAGES








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 2021-10-03.





## 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
- 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  
|  
2021 • **Senior Hulme Scholarship**  
• Senior Hulme Scholarship is awarded by Brasenose College, University of Oxford to DPhil students whose academic performance is deemed to be exceptional.
- 2019  
|  
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 London 📍 London, United Kingdom



## TEACHING EXPERIENCE

- 2021 • **Data visualization in bioinformatics - hackathon mentor** 📍 Discord
- I led the hackathon in data visualisation with emphasis on computational biology. Under my supervision, 3 teams of around 5 people each, created interactive and captivating visualisation to guide audience through results for selected cancer type. [Teaching materials](#)
- 2020 • **Online tutorials: Python for Data Science and Introduction to Python** 📍 YouTube  
[NGSeminars](#)
- I led two Python tutorials: **Introduction to Python** [kasia.codes/talk/intro\\_to\\_python/](https://kasia.codes/talk/intro_to_python/) and **Python for Data Science** [kasia.codes/talk/py4ds/](https://kasia.codes/talk/py4ds/).
- 2019 • **Unsupervised learning, Introduction to Python** 📍 Ostróda, Poland  
[#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** 📍 Oxford, United Kingdom  
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/kzakedziersa/r\\_intro](#)
- 2020 | 2019 • **Introduction to Managing Code with Git** 📍 Oxford, United Kingdom  
Wellcome Centre for Human Genetics
- I led a 2-hour introduction to working with Git. Materials, including slides and exercises are available at [kasia.codes/talk/into\\_to\\_git/](https://kasia.codes/talk/into_to_git/).



## SELECTED GRANTS

- present | 2020 • **Visegrad Grant to organize #NGSchool2020 postponed until 2022**  
[Visegrad Fund](#)
- 32,190 EUR awarded towards organising #NGSchool2020 and #NGSymposium. Due to COVID-19 pandemic we organised a virtual events in 2020 & 2021 and are planning in person summer school and conference in 2022.



## 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