

TBA



## University College London



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Queen Elizabeth's School



## Johns Hopkins Bloomberg School of Public Health

*Last updated on 2021-02-24.*

2017  
|  
2016



### Research Technician

University College London

📍 London, UK

- Used R and bash to investigate the effect of genetic variation on the age of onset of dementia and cognition within Down syndrome patients.



## INDUSTRY EXPERIENCE

2020



### Bioinformatician internship (3 months)

Verge Genomics

📍 Remote

- Detection of aberrant splicing events in complex disease patients.
- Using AWS infrastructure



## SOFTWARE & PROGRAMMING

Present  
|  
2020



### Bioconductor packages

- `dasper`<sup>3</sup>: detection of aberrant splicing events in RNA-sequencing. Author and maintainer. XXX downloads.
- `megadepth`<sup>4</sup>: BigWig and BAM related utilities. An R wrapper for the `megadepth`<sup>5</sup> software developed. Co-author and maintainer. XXXX downloads.

2021



### Chess analysis

- Applying python and data science principles through the analysis<sup>6</sup> of chess data.

2021  
|  
2020



### Advanced R

- Notes and answers to the advanced R<sup>7</sup> book in the form of a bookdown<sup>8</sup>.


2020



### Kaggle town

- Organised club to study python and machine learning through kaggle<sup>9</sup> problems.


2018  
|  
2016

- **Data wrangling**  
Neuroimmunology & CSF Laboratory, NHS  London, UK
  - Developer and maintainer of data wrangling pipelines that improved the efficiency and standardisation of monthly financial reports.




## TEACHING EXPERIENCE


2020

- **Developing Bioconductor Packages**  
University College London  Virtual Event
  - Hosted workshop<sup>70</sup> on best practices for developing Bioconductor using biocthis<sup>71</sup>


2020

- **Unit testing using testthat edition 3**  
rstats club  Virtual Event
  - Talk<sup>72</sup> regarding unit testing fundamentals, the importance of testing and new features released in the R package testthat edition 3.

2020  
|  
2018

- **R fundamentals**  
Clinician Coders  London, UK
  - Developed materials<sup>73</sup> and lead facilitator for teaching R to clinicians.

2020  
|  
2017

- **RNA-sequencing for diagnostics**  
Kings College London  London, UK
  - Invited lecturer to graduate level students on how transcriptomics can be applied in the diagnostic pipeline.



## SELECTED PUBLICATIONS

2020

- **Megadepth: efficient coverage quantification for BigWigs and BAMs**  
Bioinformatics
  - Authored with Richard Single, Vanja Paunic, Mark Albrecht, and Martin Maier.



## LINKS

1: <http://colladotor.github.io/cv/>

- 2: <http://bioconductor.org/packages/release/bioc/html/recount3.html>
- 3: <https://bioconductor.org/packages/release/bioc/html/dasper.html>
- 4: <https://bioconductor.org/packages/release/bioc/html/megadepth.html>
- 5: <https://github.com/ChristopherWilks/megadepth>
- 6: <https://github.com/dzhang32/chess>
- 7: <https://adv-r.hadley.nz>
- 8: [https://dzhang32.github.io/advanced\\_R/](https://dzhang32.github.io/advanced_R/)
- 9: <https://github.com/dzhang32/kagglings>
- 10: [https://dzhang32.github.io/biocthis\\_workshop/](https://dzhang32.github.io/biocthis_workshop/)
- 11: <https://bioconductor.org/packages/release/bioc/html/biocthis.html>
- 12: <https://youtu.be/CIain7vTwq0>
- 13: <https://github.com/ClinicianCoders/ClinicianCoders>