

# Noah Nicol

## Education

2023-09 - present	<b>Biomedical Data Science, M.S.</b> <i>University of Wisconsin - Madison</i>  GPA: 3.8
2017-09 - 2022-05	<b>Biomedical Engineering, Neurobiology, B.S.</b> <i>University of Wisconsin, Madison</i>  GPA: 3.6

## Work History

2023-01 - present	<b>Bioinformatic Scientist</b> <i>Proteovista LLC.</i> <ul style="list-style-type: none"><li>Analyzed data related to protein-binding DNA arrays, genome building technologies, high throughput mutagenesis strategies, and aptamer discovery.</li><li>Authored python scripts to drive experimental and genomic product design</li><li>Developed automated data visualization pipelines with Excel VBA and Python</li></ul>
2024-09 - 2025-03	<b>Graduate Research Assistant</b> <i>Biostatistics, Qiongshi Lu Laboratory</i> <ul style="list-style-type: none"><li>Leveraged unsupervised learning of epigenetic data to improve predictive power of biological age estimations.</li><li>Web scraping of GEO data to control for covariates in epigenetic data.</li></ul>
2022-06 - 2023-02	<b>Research Specialist</b> <i>Fujifilm Cellular Dynamics Inc</i> <ul style="list-style-type: none"><li>Applied stem cell culture and laboratory techniques to develop robust cell culture processes and assays for iPSC derivation, genetic engineering, and characterization</li><li>Authored Python scripts to assist in project data analysis</li><li>Collected and presented statistically validated data</li><li>Wrote protocols, technical reports, SOPs, and documentation</li></ul>
2021-06 - 2022-03	<b>Radiology Tech Assistant</b> <i>UW Health</i> <ul style="list-style-type: none"><li>Provided comprehensive health care services, including exam review, visit preparation, patient education, and assistance with exams and procedures</li><li>Operated various radiographic equipment and software</li></ul>
2018-12 - 2020-03	<b>Research Assistant</b> <i>Wisconsin Institute for Discovery</i> <ul style="list-style-type: none"><li>Investigated regional patterning of pluripotent stem cells and characterized various central nervous system tissues</li><li>Conducted data collection, authored a grant proposal and presented research updates</li></ul>



## Personal Info

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<b>GitHub</b> <a href="https://github.com/N5cent28">https://github.com/N5cent28</a>
<b>Website</b> noahnicol.xyz

## Programming

Python (NumPy, Pandas, Biopython, SciPy)  
R (RStudio, Tidyverse)  
MySQL  
Visual Basic

## Bioinformatics & DS:

Machine Learning (Scikit-learn, TensorFlow, Neural Networks)  
  
Data Visualization (Matplotlib, Seaborn, ggplot2, Excel)  
  
High-throughput Sequencing Data Analysis (NGS, RNA-seq)  
  
Statistical Modeling (ANOVA, Regression, PCA, Clustering)

## Laboratory Techniques

iPSC Cell Culture, Gel Electrophoresis, RT-qPCR, ICC, IHC, Flow Cytometry, Confocal Microscopy, Image Processing (ImageJ)

## Publications

**Modular derivation of diverse, regionally discrete human posterior CNS neurons enables discovery of transcriptomic patterns**

*Science Advances*, 2022

<https://doi.org/10.1126/sciadv.abn7430>

**7615 Genomic Consequences of GRHL2 Overexpression in ER+ Breast Cancer Cells**

*Journal of the Endocrine Society*, 2024

<https://doi.org/10.1210/jendso/bvae163.1809>

## Volunteering

2021-08 - present	<i>Hoofer Sailing Club</i> I share my love of windsurfing, ice kiting, and sailing with club members
2018-04 - present	<i>Ultimate Frisbee Coach</i> I organize youth ultimate day camps, assistant coach Madison West High School's varsity team, and participate in Madison Radicals sponsored youth events.

## Selected Coursework

- Statistics in Human Genetics
- Applied ML in Healthcare
- Machine Learning Theory
- Bioinformatics 1
- Stem Cell Bioengineering