# Robert M. Taylor, PhD

Scientist|Analyst|Coder


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**LinkedIn**
https://www.linkedin.com/in/robert-m-taylor-ph-d-7

**Github**
https://github.com/captainnano77

**Website**
rmtaylor.science


## Skills

Medical and Clinical Research
Chemical and Biological Research
Data Analysis
Statistical analysis
Data Mining
Machine learning
Technical writing
Project Management
Communication Skills
Image Analysis
Data Cleaning
3D Printing

## Software

Python
R
Azure Machine Learning Studio
Jupyter
Google Cloud (GCP)
Azure Cloud Services
AutoCAD Fusion360
Cura
Mathematica
Linux
Pandas
Numpy
Scikit-learn
SQL

Scientist with over 10 years of successful work experience and innovation in biomedical research, clinical research, and data science. Recognized consistently for laboratory performance excellence and contributions to success in biotechnology. Author of 10 peer-reviewed publications, 3 patent applications, and seasoned public speaker. Strengths in research, writing, and data analysis backed by training in biochemistry, biomedical sciences, and data science.

## Work History

2016-08 - Current

### Research Scientist

*University Of New Mexico, Department of Emergency Medicine, Albuquerque, NM*

- Provide project management and implementation of biomedical and material science research.
- Point-of-care diagnostic development, 3D-printing, data analysis, and data visualizations for complex issues.
- Utilize python and R programming, along with Azure Machine Learning Studio, to analyze complex datasets and innovate new solutions
- Python and R programming for exploratory data analysis for clinical and basic research studies into biomarkers and point-of-care diagnostics.
- Collaborate with leadership team to identify innovative questions and best methods of data collection.
- Published 4 peer-reviewed manuscripts, 2 patent applications, and 1 pilot grant.
- Use statistical techniques for hypothesis testing and validation.
- Presented data and conclusions to improve strategies.
- Propose solutions to improve efficiencies and reduce expenses.
- Manage all aspects of human and animal studies.
- Leverage interpersonal and oral communication skills to mentor PhD, graduate and undergraduate students.
- Lead research team of 3 graduate students and staff scientists.
- TEM imaging and image analysis

2014-01 - 2016-07

### Chemistry Faculty

*Central New Mexico Community College, Albuquerque, NM*

- Facilitated instruction to maximize learning by implementing active learning techniques for 10 sections of general chemistry labs and courses.
- Prepared innovative plans, materials and activities for students to reach chemistry learning outcomes.
- Constructed and administered tests and exams.
- Designed and implemented course curriculum that reflected relevance of chemistry to everyday world.

2012-05 - 2015-05

### ASERT Postdoctoral Fellow

*University Of New Mexico, Department of Pathology, Albuquerque, NM*

- Authored professional scientific papers for publishing in peer-reviewed journals.
- Collaborated with colleagues to gather research and publish.
- Conducted independent and innovative translational research related to material science and cancer biology.
- Conducted research guided by faculty supervisor in accordance with institutional and federal guidelines.

- Developed active learning curriculum for 1 entire biochemistry and organic chemistry community college course.

2007-08 - 2012-05

### Graduate Research Assistant

*University Of New Mexico, Department of Biochemistry and Molecular Biology, Albuquerque, NM*

- Magnetic Resonance Imaging (MRI) and Image Analysis
- Worked on translational research project, studying effects of magnetic and chemotherapeutic nanoparticles on prostate cancer.
- Researched information to assist professors with academic pursuits.
- Prepared reports and presentations.
- Published 5 manuscripts in peer-reviewed journal publications.
- Performed complex big data analysis, related to Nuclear Magnetic Resonance (NMR) and Magnetic Resonance Imaging (MRI), using unix-based systems, Mathematica, and excel.
- Supervised undergraduate students working on research projects.
- Recorded data and maintained source documentation following good documentation practices.

2007-06 - 2009-05

### Research Consultant

*NanoMR Inc., Albuquerque, NM*

- Provided consultation, innovation, protocol development, and nanoparticle synthesis/characterization for a point-of-care clinical system.
- Generated data models, performed analysis, and produced reports.
- Presented results, giving leadership power to make timely decisions.
- Completed projects by deadline and under budget for company-wide initiatives, helping to secure $1.0 million in second-round funding.

## Education

2007-08 - 2012-05

### PhD.: Biomedical Sciences

*University of New Mexico - Albuquerque, NM*

2002-08 - 2007-05

### Bachelor of Arts: Biochemistry

*University of New Mexico - Albuquerque, NM*

## Certifications

2019-04

**IBM Data Science Professional**, Coursera

2019-10

**Data Science & Data Engineering**, Accredited by University of New Mexico and Data Science Dojo