

## CURRICULUM VITÆ

**FULL NAME:** Joseph Daniel Romano, MPhil, MA

**CURRENT POSITION:** PhD Candidate,  
Graduate Research Assistant

**INSTITUTION:** Columbia University

**CURRENT EMAIL:** jdr2160 [at] cumc.columbia.edu

**ADDRESS:** Department of Biomedical Informatics  
Columbia University Medical Center  
622 W. 168<sup>th</sup> Street  
Presbyterian Hospital Bldg. 20<sup>th</sup> Floor  
New York, NY 10032

**LAST UPDATED:** Tuesday 10<sup>th</sup> April, 2018

---

### EDUCATION

2014–present **Doctor of Philosophy** — Prospective (Biomedical Informatics)  
Dissertation advisor: Nicholas Tatonetti, PhD  
Columbia University; New York, NY

2014–2017 **Master of Philosophy** (Biomedical Informatics)  
Columbia University; New York, NY

2014–2016 **Master of Arts** (Biomedical Informatics)  
Columbia University; New York, NY

2010–2014 **Bachelor of Science** (Molecular Genetics)  
Research Advisor: Neil Sarkar, PhD, MLIS, FACMI  
University of Vermont; Burlington, VT

2011–2012 International Student Exchange Program  
C.I.E.L.D. (国際関係学部国際教育センター)  
Nihon University; Mishima, Shizuoka prefecture, Japan

---

### PUBLICATIONS

1. **Romano JD**, Tharp WG, Sarkar IN. “Exploring Complex Disease Gene Relationships Using Simultaneous Analysis.” *UVM Honors College Senior Theses*. 2014.
2. **Romano JD**, Tharp WG, Sarkar IN. “Adapting Simultaneous Analysis Phylogenomic Techniques to Study Complex Disease Gene Relationships.” *Journal of Biomedical Informatics*; 2014 Apr;(54):10–38.
3. **Romano JD**, Tatonetti NP. “VenomKB, a new knowledge base for facilitating the validation of putative venom therapies.” *Scientific Data*; 2015 Nov;(2):65.
4. Boland MR, Jacunski A, Lorberbaum T, **Romano JD**, Moskovitch R, Tatonetti NP. “Systems Biology Approaches for Identifying Adverse Drug Reactions and Elucidating Their Underlying Biological Mechanisms.” *WIREs Systems Biology and Medicine*; 2016 Mar;8(2):104–22.

5. **Romano JD**, Tatonetti NP. “Using a Novel Ontology to Inform the Discovery of Therapeutic Peptides from Animal Venoms.” *AMIA Joint Summits on Translational Science Proceedings (Second place, TBI student paper competition)*.; 2016 Jul;(2016):209-18.
6. Vanguri RS, **Romano JD**, Lorberbaum T, Nwankwo V, Youn C, Tatonetti NP. “nSides: An interactive drug–side effect gateway.” *Gateways 2017*.
7. **Romano JD**, Nwankwo V, Tatonetti NP. “VenomKB v2.0: A knowledge repository for computational toxinology.” *bioRxiv*; 2018; doi:10.1101/295204
8. Vanguri RS, **Romano JD**, Lorberbaum T, Nwankwo V, Youn C, Tatonetti NP. “A Distributed Infrastructure for Drug Effect Discovery using Spontaneous Reporting Systems.” (In review).
9. **Romano JD**, Polubriaginof F, Yahi A, Vawdrey D, Tatonetti NP. “Open Data: A review of current methods used for discovery in biomedical research.” (In review).

---

## CONFERENCE PRESENTATIONS and INVITED TALKS

- |      |   |
|------|---|
| 2018 | <b>VenomSeq—A platform for drug discovery from animal venoms using differential gene expression</b> , <i>AMIA 2018 Informatics Summit</i> , American Medical Informatics Association; San Francisco, CA   |
| 2018 | <b>Computational Resources for Personalized Genomics: High Performance Clusters and Bioinformatics Resources for Analysis and Functional Interpretation of Next-Generation Sequencing Data (tutorial session)</b> , American Medical Informatics Association; San Francisco, CA |
| 2017 | <b>Deep recurrent neural networks identify transgender patients</b> , <i>2017 AMIA Annual Symposium</i> , American Medical Informatics Association; Washington, DC  |
| 2017 | <b>High-sensitivity Stroke Phenotyping using Recurrent Neural Networks</b> , <i>AMIA Joint Summits on Translational Science 2017</i> , American Medical Informatics Association; San Francisco, CA  |
| 2016 | <b>Building a Centralized Resource for Computational Venom Research</b> , <i>National Library of Medicine Informatics Training Conference 2016</i> , The Ohio State University College of Medicine; Columbus, OH  |
| 2015 | <b>Venom Peptides as Therapeutic Agents: Can we use Phylogenetics to Inform Drug Discovery?</b> , <i>13th Annual Rocky Mountain Bioinformatics Conference</i> , International Society for Computational Biology; Aspen, CO  |
| 2015 | <b>Data-Driven Clinical Research Generalizability Assessment and Improvement</b> , <i>8th Annual Mid-Atlantic Healthcare Informatics Symposium</i> , Department of Biomedical and Health Informatics, The Children’s Hospital of Philadelphia; Philadelphia, PA                 |
| 2015 | <b>Computational Prediction of Therapeutic Uses for Venom Compounds</b> , <i>Research Seminar Series in Biomedical Informatics</i> , Columbia University Department of Biomedical Informatics; New York, NY   |
| 2015 | <b>Observational Health Data Sciences and Informatics (OHDSI)</b> , <i>Innovation and Application @ Columbia</i> , Columbia University Data Science Institute; New York, NY   |

---

## GRANT SUPPORT

- |              |  |
|--------------|--|
| 2015–2017    | <b>Training in Biomedical Informatics at Columbia University</b> . T15 LM007079 National Library of Medicine. (PI: Hripcsak).                                      |
| 2014–present | <b>Drug Effect Discovery Through Data Mining and Integrative Chemical Biology</b> . R01 GM107145 National Institute for General Medical Sciences. (PI: Tatonetti). |

---

## TEACHING EXPERIENCE

- |             |  |
|-------------|--|
| Spring 2018 | <i>BINF G4003 — Methods II: Symbolic Methods</i> (Guest Lecturer—1 lecture). |
|-------------|--|

	Columbia University; New York, NY.
Spring 2017	<i>BINF G4003 — Methods II: Symbolic Methods</i> (Teaching Assistant). Columbia University; New York, NY.
Fall 2016	<i>BINF G4006 — Translational Bioinformatics</i> (Guest Lecturer—2 lectures). Columbia University; New York, NY.
Fall 2016	<i>BINF G4000 — Acculturation to Programming and Statistics</i> (Teaching Assistant). Columbia University; New York, NY.
Spring 2014	<i>Linux and UNIX Operating Systems</i> . UVM Enterprise Technology Services, UVM TechTeam; Burlington, VT.
Spring 2012	<i>MMG 104 — Introduction to Recombinant DNA Technology</i> (Teaching Assistant). University of Vermont; Burlington, VT.
Fall 2011	English Language Teaching Assistant. Nihon University College of International Relations; Mishima, Japan.

---

## HONORS, AWARDS, and FELLOWSHIPS

2015–2017	<b>Biomedical Informatics Research Fellow</b> , US National Library of Medicine
2010–2014	<b>Honors Scholar</b> , University of Vermont Honors College
2010–2014	<b>Vermont Scholar</b> , University of Vermont
2009	<b>AP Scholar with Honors</b> , College Board
2009	<b>National Merit Scholar</b> , National Merit Scholarship Corporation
2009	<b>Eagle Scout</b> , Boy Scouts of America

---

## BOARD and COMMITTEE APPOINTMENTS

2018–present	<b>Chair-Elect</b> , <i>AMIA Student Working Group</i> , American Medical Informatics Association
2015–present	<b>Communications and Social Media Coordinator</b> , <i>AMIA Genomics and Translational Bioinformatics Working Group</i> , American Medical Informatics Association
2015	<b>Assistant Editor</b> , <i>Editorial Committee</i> , 15th World Congress on Health and Biomedical Informatics; São Paulo, Brazil
2014	<b>Committee Member</b> , “ <i>Year In Review: Informatics in the Media 2014</i> ” <i>Student Review Committee</i> , American Medical Informatics Association Annual Symposium; Washington, D.C.

---

## REVIEW ACTIVITIES

*AMIA Annual Symposium*  
*AMIA Joint Summits on Translational Science*  
*IEEE International Conference on Healthcare Informatics*  
*Nature Scientific Reports*  
*Pacific Symposium on Biocomputing*  
*World Congress on Health and Biomedical Informatics*

---

## PROFESSIONAL MEMBERSHIPS and AFFILIATIONS

2017–present American Society of Clinical Pharmacology and Therapeutics  
2016–present International Society on Toxinology  
2014–present International Society for Computational Biology  
2014–present New York Academy of Sciences  
2014–present American Association for the Advancement of Science  
2012–present American Medical Informatics Association (AMIA)  
2011–2014 Alpha Zeta academic honors fraternity  
2011–2014 UVM Biochemistry Society

---

## WORK EXPERIENCE

2010–2014 **Level IV Lead Technician**, *University of Vermont Enterprise Technology Services*; Burlington, VT.  
Student management position at a walk-in software support clinic and telephone computing helpline serving all students, faculty, and staff at the University of Vermont.

2007–2014 **Front Desk Manager**, *Cedarbrook at Killington / North Star Lodge*; Killington, VT.  
Oversaw all aspects of customer service at a timeshare resort. Includes answering phone calls, checking in/out guests, auditing the resort, and overseeing property maintenance.

Summer 2010 **Desktop Support Technician**, *Central Vermont Public Service*; Rutland, VT.  
Summer internship providing software and hardware support for all CVPS employees, as well as maintaining and troubleshooting the company’s enterprise-level network.

2009–2010 **IT Technician**, *University of Rochester ITS*; Rochester, NY.  
Provided desktop support to faculty, staff, and students of the University of Rochester. Additionally, managed computing lab facilities available to University affiliates.