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. 168th Street

Presbyterian Hospital Bldg. 20th Floor

New York, NY 10032

LAST UPDATED: Sunday 28th January, 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. 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).
- 8. **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).
- 9. Romano JD, Nwankwo V, Tatonetti NP. "VenomKB v2.0." (In review).

CONFERENCE PRESENTATIONS and TALKS

| 2018 | VenomSeq—A platform for drug discovery from animal venoms using differential |
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| | gene expression, AMIA 2018 Informatics Summit, American Medical Informatics Association; |
| | San Francisco, CA |

- 2017 Deep recurrent neural networks identify transgender patients, 2017 AMIA Annual Symposium, American Medical Informatics Association; Washington, DC
- 2017 **High-sensitivity Stroke Phenotyping using Recurrent Neural Networks**, AMIA Joint Summits on Translational Science 2017, American Medical Informatics Association; San Francisco, CA
- 2016 Building a Centralized Resource for Computational Venom Research, National Library of Medicine Informatics Training Conference 2016, The Ohio State University College of Medicine; Columbus, OH
- Venom Peptides as Therapeutic Agents: Can we use Phylogenetics to Inform Drug Discovery?, 13th Annual Rocky Mountain Bioinformatics Conference, International Society for Computational Biology; Aspen, CO
- 2015 Data-Driven Clinical Research Generalizability Assessment and Improvement, 8th Annual Mid-Atlantic Healthcare Informatics Symposium, Department of Biomedical and Health Informatics, The Children's Hospital of Philadelphia; Philadelpha, PA
- 2015 Computational Prediction of Therapeutic Uses for Venom Compounds, Research Seminar Series in Biomedical Informatics, Columbia University Department of Biomedical Informatics; New York, NY
- 2015 Observational Health Data Sciences and Informatics (OHDSI), Innovation and Application @ Columbia, Columbia University Data Science Institute; New York, NY

FELLOWSHIPS and GRANT SUPPORT

2015-2017 NLM T15 Training Fellow, National Library of Medicine

TEACHING EXPERIENCE

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

HONORS and **AWARDS**

| 2010 – 2014 | Honors Scholar, University of Vermont Honors College |
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| 2010 – 2014 | Vermont Scholar, University of Vermont |
| 2009 | AP Scholar with Honors, College Board |
| 2009 | National Merit Scholar, National Merit Scholarship Corporation |
| 2009 | Eagle Scout, Boy Scouts of America |

BOARD and COMMITTEE APPOINTMENTS

| 2018-present | Chair-Elect, AMIA Student Working Group, American Medical Informatics Association |
|--------------|--|
| 2015-present | Communications and Social Media Coordinator, AMIA Genomics and Translational |
| | Bioinformatics Working Group, American Medical Informatics Association |
| 2015 | Assistant Editor, Editorial Committee, 15th World Congress on Health and Biomedical Infor- |
| | matics; São Paulo, Brazil |
| 2014 | Committee Member, "Year In Review: Informatics in the Media 2014" Student Review Com- |
| | mittee, 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

| Level IV Lead Technician , University of Vermont Enterprise Technology Services; Burlington, |
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| 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. |
| 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.