

# Robert Allaway

PRINCIPAL SCIENTIST

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## Job History

### Principal Scientist

SCIENTIFIC COORDINATION & COMMUNITY ENGAGEMENT

Sage Bionetworks

2022 - Present

### Senior Scientist

COMPUTATIONAL ONCOLOGY, SAGE BIONETWORKS

Seattle, WA

2020 - 2022

### Research Scientist

COMPUTATIONAL ONCOLOGY, SAGE BIONETWORKS

Seattle, WA

2018 - 2020

### Postdoctoral Fellow

COMPUTATIONAL ONCOLOGY, SAGE BIONETWORKS

Seattle, WA

2016 - 2018

### Biological Sciences Technician

DIVISION OF APPLIED PHARMACOLOGY RESEARCH, CDER, FDA

White Oak, MD

2010 - 2010

### Biological Sciences Technician

DIVISION OF APPLIED PHARMACOLOGY RESEARCH, CDER, FDA

White Oak, MD

2009 - 2009

### Biological Sciences Aide

DIVISION OF APPLIED PHARMACOLOGY RESEARCH, CDER, FDA

White Oak, MD

2008 - 2008

## Education

### Dartmouth College Geisel School of Medicine

PHD EXPERIMENTAL AND MOLECULAR MEDICINE

Hanover, NH, US

2011 - 2016

### Dickinson College

BS BIOLOGY, BS CHEMISTRY

Carlisle, PA, US

2007 - 2011

## Selected Publications

(\*indicates co-first authors, ^indicates co-corresponding authors)

1. Sun\* D, Nguyen\* T, Allaway\* R, et.al. A crowdsourcing approach to develop machine learning models to quantify radiographic joint damage in rheumatoid arthritis. *JAMA Network Open* (in press). Published online 2022. doi:10.1101/2021.10.25.21265495
2. Banerjee J, ..., Allaway^ R, Blakeley^ J. COVID-19 in people with neurofibromatosis 1, neurofibromatosis 2, or schwannomatosis. *medRxiv* (preprint server). Published online 2022. doi:10.1101/2022.03.31.22273208
3. Clayton\* A, DeFelice\* M, Zalmanek\* B, ..., Goss^ J, Allaway^ R. Centralizing neurofibromatosis experimental tool knowledge with the NF research tools database. *Database*. Published online 2022. doi:10.1093/database/baac045
4. Douglass\* E, Allaway\* R, Szalai\* B, et.al. A community challenge for a pancancer drug mechanism of action inference from perturbational profile data. *Cell Reports Medicine*. Published online 2022:100492. doi:10.1016/j.xcrm.2021.100492
5. Xiong\* Z, Jeon\* M, Allaway\* R, et.al. Crowdsourced identification of multi-target kinase inhibitors for RET- and TAU- based disease: The multi-targeting drug DREAM challenge. *PLOS Computational Biology*. Published online September 2021. doi:10.1371/journal.pcbi.1009302
6. Cichonska\* A, Ravikumar\* B, Allaway\* R, et.al. Crowdsourced mapping of unexplored target space of kinase inhibitors. *Nature Communications*. Published online June 3, 2021. doi:10.1038/s41467-021-23165-1
7. Banerjee\* J, Allaway\* R, et.al. Integrative analysis identifies candidate tumor microenvironment and intracellular signaling pathways that define tumor heterogeneity in NF1. *Genes*. Published online 2020. doi:10.3390/genes11020226

8. Allaway R, et.al. Engaging a community to enable disease-centric data sharing with the NF data portal. *Scientific Data*. Published online December 2019. doi:10.1038/s41597-019-0317-x
9. Allaway R, et.al. Probing the chemical-biological relationship space with the drug target explorer. *Journal of Cheminformatics*. Published online August 2018. doi:10.1186/s13321-018-0297-4
10. Allaway R, et.al. Cutaneous neurofibromas in the genomics era: Current understanding and open questions. *British Journal of Cancer*. Published online April 2018. doi:10.1038/s41416-018-0073-2
11. Allaway R, et.al. Exploiting mitochondrial and metabolic homeostasis as a vulnerability in NF1 deficient cells. *Oncotarget*. Published online 2018:15860-15875.
12. Allaway\* R, Fischer\* D, et.al. Genomic characterization of patient-derived xenograft models established from fine needle aspirate biopsies of a primary pancreatic ductal adenocarcinoma and from patient-matched metastatic sites. *Oncotarget*. Published online March 2016. doi:10.18632/oncotarget.7718

## Society Membership

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### Open Bioinformatics Foundation

MEMBER

2021 - Present

### Calyx Institute

SUSTAINER

2021 - Present

### Puget Sound Mycological Society

MEMBER

2021 - Present

### Data Visualization Society

MEMBER

2019 - Present

### International Society for Computational Biology

MEMBER

2019 - 2021

### American Association for Cancer Research

ACTIVE MEMBER

2018 - Present

### American Chemical Society

MEMBER

2013 - 2019

## Peer Review and Service

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### Manuscript Reviewer

BIOINFORMATICS, JOURNAL OF CHEMINFORMATICS, BMC CANCER, JOURNAL OF CELLULAR AND MOLECULAR MEDICINE, PLoS  
COMPUTATIONAL BIOLOGY

### Grant Reviewer

CHILDREN'S TUMOR FOUNDATION, CD2H IDEA COMPETITION

### Mentor and Co-Organizer

2019 NEUROFIBROMATOSIS HACKATHON, 2020 NEUROFIBROMATOSIS HACKATHON, 2021 HACK4RARE, 2022 HACK4NF (IN  
DEVELOPMENT)

## Awards

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### Children's Tumor Foundation

TEAM SCIENCE AWARD

2017

### Albert J. Ryan Foundation

RYAN FELLOW

2016

### Dartmouth College

GRADUATE STUDIES TRAVEL AWARD

2015

### American Association for the Advancement of Science

PROGRAM FOR EXCELLENCE IN SCIENCE

2015

**Children’s Tumor Foundation**

YOUNG INVESTIGATOR AWARD

2014 - 2016

- 2 years of research and travel funding totaling \$69,000

**Dickinson College Chemistry Department**

JOHN E. BENSON HANDBOOK AWARD

2011

**Undergraduate Research Fellowship**

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION (ORISE)

2010