

Tel & Twitter

+1 505 5064203
scalefreegan

Mail

aaron.brooks@
systemsbiology.org
brooksan@
uw.edu

Web

aaron-brooks.org
linkedin/aaron-brooks
github/scalefreegan

AaronBrooks/PhDc

Science of complex biological systems

Publications

DJ Reiss , CL Plaisier, W Wu , **AN Brooks**, NS Baliga. **Python cMonkey**. *In preparation*.

CL Plaisier, FY Lo, J Ashworth, **AN Brooks**, KD Beer, A Kaur, M Pan, DJ Reiss, FT Facciotti, NS Baliga . **Evolution of Context Dependent Regulation by Expansion of Feast/Famine Regulatory Proteins**. *Submitted*.

DM Salvanha, **AN Brooks**, DJ Reiss, RZN Vêncio, NS Baliga. **iGB^{web}: an interactive genome browser for the web**. *Submitted*.

H Westerhoff*, **AN Brooks***, E Simeonidis*, R García-Contreras*, F Boogerd, F He, VJ Jackson, V Goncharuk, A Kolodkin. **Macromolecular networks and intelligence in microorganisms**. *Accepted Frontiers in Microbiology*.

AN Brooks*, DJ Reiss*, A Allard, W Wu, DM Salvanha, CL Plaisier, S Chandrasekaran, M Pan, A Kaur, NS Baliga. **A system-level model for the microbial regulatory genome**. *In press Mol Sys Biol*.

AN Brooks, S Turkarslan, KD Beer, FY Lo, NS Baliga. **Adaptation of cells to new environments**. *Wiley Interdiscip Rev Syst Biol Med*. 2010 Dec 31. PMID: 21197660

* Denotes equal contribution

Education

2008 - 2014 **PhD in Molecular and Cellular Biology** [University of Washington](#)
Thesis: "Data-driven inference of dynamic transcriptional regulatory mechanisms in prokaryotes: a systems perspective."
Advisor: Prof. Nitin Baliga, Institute for Systems Biology

2002 - 2007 **BS in Biochemistry, Summa Cum Laude** [University of New Mexico](#)
Thesis: "Characterization of the dynamic interactions of cytoplasmic poly(A) binding protein with poly(A) RNA."
Thesis Honors: Robert B. Loftfield Award
Advisor: Prof. David G. Bear

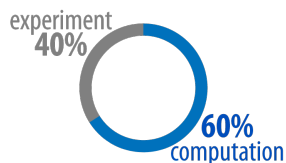
2002 - 2007 **BA in Political Science, Summa Cum Laude** [University of New Mexico](#)
General University Honors
Minor: Philosophy

In the news

05/2014 **Knowing Networks** [NIH NIGMS Inside Life Science](#)
Outreach at USA Science and Engineering Festival

Awards

Research Breakdown



Research Interests



Wetlab
 MolBio ★★★★★
 Cytometry ★★★★★
 Expression ★★★★★
 Bioreactor ★★★★★
 Sequencing ★★★★★
 Microscopy ★★★★★

2010-2013	Office of Science Graduate Fellowship	Department of Energy
2009	Graduate Research Fellowship Honorable Mention	National Science Foundation
2006	Goldwater Scholarship	Barry M. Goldwater Foundation

Programming

R ★★★★★
 Python ★★★★★
 Bash ★★★★★
 SQL ★★★★★
 Malab ★★★★★
 HTML/JS ★★★★★
 C++ ★★★★★

Teaching & Outreach

2014	USA Science and Engineering Festival <i>Designed and facilitated a hands-on activity and web-based game to understand the structure and function of networks. Over 300 children have played the online game.</i>	Washington, D.C
2011	Introduction to Systems Biology <i>Co-organizer, lecturer</i>	Institute for Systems Biology
2009-now	Science Communication Fellow	Pacific Science Center, Seattle WA
2010	Graduate Teaching Assistant <i>MICRO 411: Gene Action</i>	Microbiology, University of Washington
2005-2006	Education Assistant <i>BIOCHEM 445: Intensive Biochemistry</i> <i>BIOCHEM 448: Biochemical Methods</i>	Biochemistry, University of New Mexico

Research Summary

Intelligence
 Conditions
GENE
 Network
 EGRIN
 Evolution
 Data
 Systems
 CRE
 Regulatory
 Model
 Core
 Expression
 Biological
 Genome

Students mentored

08-12/2012	Robin Green Currently at Fred Hutchinson Cancer Research Center	PhD student at University of Washington, WA
05-08/2011	Darach Miller Currently PhD student at NYU	Undergraduate at UC Davis, CA
05-08/2010	Alexis Valauri-Orton Currently Watson Fellow	Undergraduate at Davidson College, NC

Other

2011	Complex Systems Summer School	Santa Fe Institute
2010	MCB Student Symposium <i>Co-organizer, Bioplasticity: flexibility within and beyond the code</i>	Fred Hutchinson Cancer Research Center

References

Nitin Baliga, PhD +1 206 7321266 nbaliga@systemsbiology.org	Institute for Systems Biology
Ilya Shmulevich, PhD +1 206 7321212 ilya.shmulevich@systemsbiology.org	Institute for Systems Biology
Elhanan Borenstein, PhD +1 206 6858165 elbo@uw.edu	University of Washington