

Carlo C. Maley

Short Curriculum Vitae

Prepared: 9/25/20

INTERESTS

I am a cancer biologist, evolutionary biologist and computational biologist, working at the intersection of those fields. My teams use tools from evolution and ecology to help solve four problems in cancer: (1) We use evolutionary and ecological measures of neoplasms to distinguish high from low risk tumors. (2) We develop new approaches for delaying or deflecting the evolutionary trajectories of pre-malignant neoplasms to prevent cancer. (3) We develop new methods to prevent or control the evolution of therapeutic resistance in cancers. (4) We seek to discover (and translate to human cancer prevention) the mechanisms that have evolved to suppress cancer in large, long-lived animals like elephants and whales – a problem known as Peto’s Paradox.

PUBLICATIONS

Total Citations: 10,882

Current h-index: 44

[My profile and list of publications](#) can be found on google scholar:

<https://scholar.google.com/citations?user=uiMfVzYAAAAJ&hl=en&oi=ao>

EDUCATION:

1993-98	Massachusetts Institute of Technology (Rodney Brooks at MIT and Michael Donoghue at Harvard)	Ph.D.	Computer Science
1991-93	University of Oxford	M.Sc.	Zoology
1987-91	Oberlin College, Oberlin, OH	B.A.	Computer Science & Psychology

PRINCIPAL POSITIONS HELD:

2018-now	Arizona State University	Director	Arizona Cancer Evolution Center
2015-now	Arizona State University	Associate Professor	School of Life Sciences
2015-now	St. Joseph’s Hospital and Medical Center	Research Professor	Norton Thoracic Institute, Phoenix
2014-18	Institute of Cancer Research, London	Associate Director	Centre for Evolution and Cancer
2010-15	University of California, San Francisco	Adjunct Associate Professor	Surgery
2005-10	The Wistar Institute	Assistant Professor	Oncogenesis
2000-05	Fred Hutchinson Cancer Research Center	Staff Scientist	Human Biology
1998-2000	University of New Mexico	Postdoc	Computer Science
1998	Harvard University	Postdoc	Organismal and Evolutionary Biology

HONORS AND AWARDS:

1991 Graduated Oberlin College *summa cum laude*

1991-1993	Marshall Scholarship
2000-2001	Alfred P. Sloan Fellowship in Computational and Molecular Biology
2001	NIGMS Fellowship Award (declined)
2001-2006	NCI Howard Temin Award (K01)
2003	AACR Rodger C. Haggitt Award
2008	First winner of the Landon AACR Innovator Award for Cancer Prevention Research
2013-2014	Fellow of the Berlin Institute for Advanced Study (Wissenschaftskolleg zu Berlin)
2018-2020	First elected president of the International Society for Evolution, Ecology and Cancer

CURRENT GRANTS

4. U2C CA233254 (Drs. Shelley Hwang, Carlo Maley and Robert West) NIH/NCI: Breast Pre-Cancer Atlas Center	9/21/18-6/30/23
3. ADHS18-198847 (Dr. C. Maley, PI) Arizona Biomedical Research Commission Pilot Trial of Adaptive Therapy for Late Stage Breast Cancer	4/1/18-3/31/21
2. U54 CA217376 (Drs. Carlo Maley and Darryl Shibata, Co-PIs) NIH/NCI Arizona Cancer Evolution Center	4/12/18-3/31/23
1. Breakthrough Award BC132057 (Drs. Carlo Maley & Shelley Hwang Co-PIs) DoD/Breast Cancer Research Program Genomic and Microenvironmental Diversity as Drivers of Progression in DCIS	6/1/14-9/30/21