

Dan was born and raised in the Berkshire Hills of Massachusetts, a few miles from Tanglewood. According to familial legend, MIT entered his world at the age of 6 when he declared that it was the college of his choice. Dan later obtained a Bachelor's degree at MIT in Course 7 (Life Sciences).

While pursuing his doctorate at Johns Hopkins, he cultivated his loves for engineering, theory and music. After graduation, Dan pursued a path involving multiple forays into various types of music composition and performance, modern and Afro-ethnic dance, and software engineering in New York City.

A period of introspection and retrospection in the early aughts led Dan back to the MIT campus, where he was surprised to find a job listing in the campus newspaper that appeared to be written specifically to his resume. It turned out to be from the Graybiel Lab, which Dan joined in 2003.

When not programming or analyzing data, Dan's interests include dance, djimbe (an African drum), good food, and many different fields of science. He misses playing with his Rush Tribute band from his NYC days, Power Windows.

Experience

Massachusetts Institute of Technology
McGovern Institute for Brain Research / Department of Brain and Cognitive Sciences
Sponsored Research Staff 3/2003-present

ebusinessware
Senior Technology Partner 3/2001-3/2003

Citigroup - Global Corporate & Investment Bank
Consultant; Senior Systems Analyst; Project Manager / System Architect
10/1997-3/2001

Independent Consultant 1996-1998

ImClone Systems, Inc.
Senior Systems Analyst, Project Manager 1988-1990

Mt. Sinai Medical School
Instructor 1985-1988

Publications

- Amemori KI, Amemori S, Gibson DJ, Graybiel AM. Front Neurosci. Striatal Beta Oscillation and Neuronal Activity in the Primate Caudate Nucleus Differentially Represent Valence and Arousal Under Approach-Avoidance Conflict. 2020 Feb 7;14:89.
- Hong S, Amemori S, Chung E, Gibson DJ, Amemori KI, Graybiel AM. Predominant Striatal Input to the Lateral Habenula in Macaques Comes from Striosomes. Curr Biol. 2019 Jan 7;29(1):51-61.e5.
- Amemori KI, Amemori S, Gibson DJ, Graybiel AM. Striatal Microstimulation Induces Persistent and Repetitive Negative Decision-Making Predicted by Striatal Beta-Band Oscillation. Neuron. 2018 Aug 22;99(4):829-841.
- Schwerdt HN, Shimazu H, Amemori KI, Amemori S, Tierney PL, Gibson DJ, Hong S, Yoshida T, Langer R, Cima MJ, Graybiel AM. Long-term dopamine neurochemical monitoring in primates. Proc Natl Acad Sci U S A. 2017 Dec 12;114(50):13260-13265.
- Crittenden JR, Lacey CJ, Weng FJ, Garrison CE, Gibson DJ, Lin Y, Graybiel AM. Striatal Cholinergic Interneurons Modulate Spike-Timing in Striosomes and Matrix by an Amphetamine-Sensitive Mechanism. Front Neuroanat. 2017 Mar 21;11:20.
- Feingold J, Gibson DJ, DePasquale B, Graybiel AM. Bursts of beta oscillation differentiate postperformance activity in the striatum and motor cortex of monkeys performing movement tasks. Proc Natl Acad Sci USA. 2015 Nov 3; 112(44):13687-13692.

- Howe MW, Atallah HE, McCool A, Gibson DJ, Graybiel AM. Habit learning is associated with major shifts in frequencies of oscillatory activity and synchronized spike firing in striatum. Proc Natl Acad Sci USA. 2011 Oct 4;108(40):16801-6
- Tort AB, Kramer MA, Thorn C, Gibson DJ, Kubota Y, Graybiel AM, Kopell NJ. Dynamic cross-frequency couplings of local field potential oscillations in rat striatum and hippocampus during performance of a T-maze task. Proc Natl Acad Sci USA. 2008 Dec 23;105(51):20517-22.
- DeCoteau WE, Thorn C, Gibson DJ, Courtemanche R, Mitra P, Kubota Y, Graybiel AM. Learning-related coordination of striatal and hippocampal theta rhythms during acquisition of a procedural maze task. Proc Natl Acad Sci USA. 2007 Mar 27;104(13):5644-9.
- DeCoteau WE, Thorn C, Gibson DJ, Courtemanche R, Mitra P, Kubota Y, Graybiel AM. Oscillations of local field potentials in the rat dorsal striatum during spontaneous and instructed behaviors. J Neurophysiol. 2007 May;97(5):3800-5.
- Gibson DJ, Young ED, Costalupes JA (1985) Similarity of dynamic range adjustment in auditory nerve and cochlear nuclei. J. Neurophysiol. 53:940-958.
- Costalupes JA, Young ED, Gibson DJ (1984) Effects of continuous noise on rate response of auditory nerve fibers in cat. J. Neurophysiol. 51:1326-1344.
- Gibson DJ (1982) Interaural crosstalk in the cat. Hear. Res. 7:325-333.

Honors

National Science Foundation Graduate Fellowship awarded 1977

Education

B. S. Life Sciences 1977, Massachusetts Institute of Technology
 Ph. D. Biophysics 1983, The Johns Hopkins University