

Barbara Shinn-Cunningham

Professor at Carnegie Mellon University

Pittsburgh, PA, US

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Biography

Barbara Shinn-Cunningham is the director of the Carnegie Mellon Neuroscience Institute. Her research explores such issues as how do we make sense of speech and other sounds, how our brain networks allow us to focus attention and suppress uninteresting sound and whether we can develop new assistive communication devices and technologies that leverage knowledge from auditory neuroscience to aid listeners with hearing impairment or other communication disorders. Her work uses behavioral, neuroimaging and computational methods to understand auditory processing, from how sound is encoded in the inner ear to how cognitive networks modulate the representation of auditory information in the brain.

Industry Expertise

Education/Learning

Areas of Expertise

Non-Invasive Brain Monitoring, Mathematical & Statistical Methods, Computational, Cognitive Neuroscience, Characterization of Neural Circuits, Auditory Research, Behavioral Methods, Computational Neuroscience, Executive Control & Memory, Spatial Cognition & Attention, Sensation & Perception

Affiliations

American Institute for Medical and Biological Engineers : Fellow, National Research Council : Associate Member, American Statistical Association : Fellow

Education

Massachusetts Institute of Technology

Ph.D. Electrical & Computer Engineering

Massachusetts Institute of Technology

M.S. Electrical & Computer Engineering

Brown University

B.S. Electrical Engineering

Accomplishments

Helmholtz-Rayleigh Interdisciplinary Silver Medal
2019

David T. Blackstock Mentorship Award
2013

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