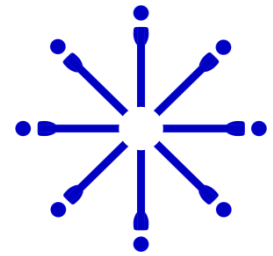


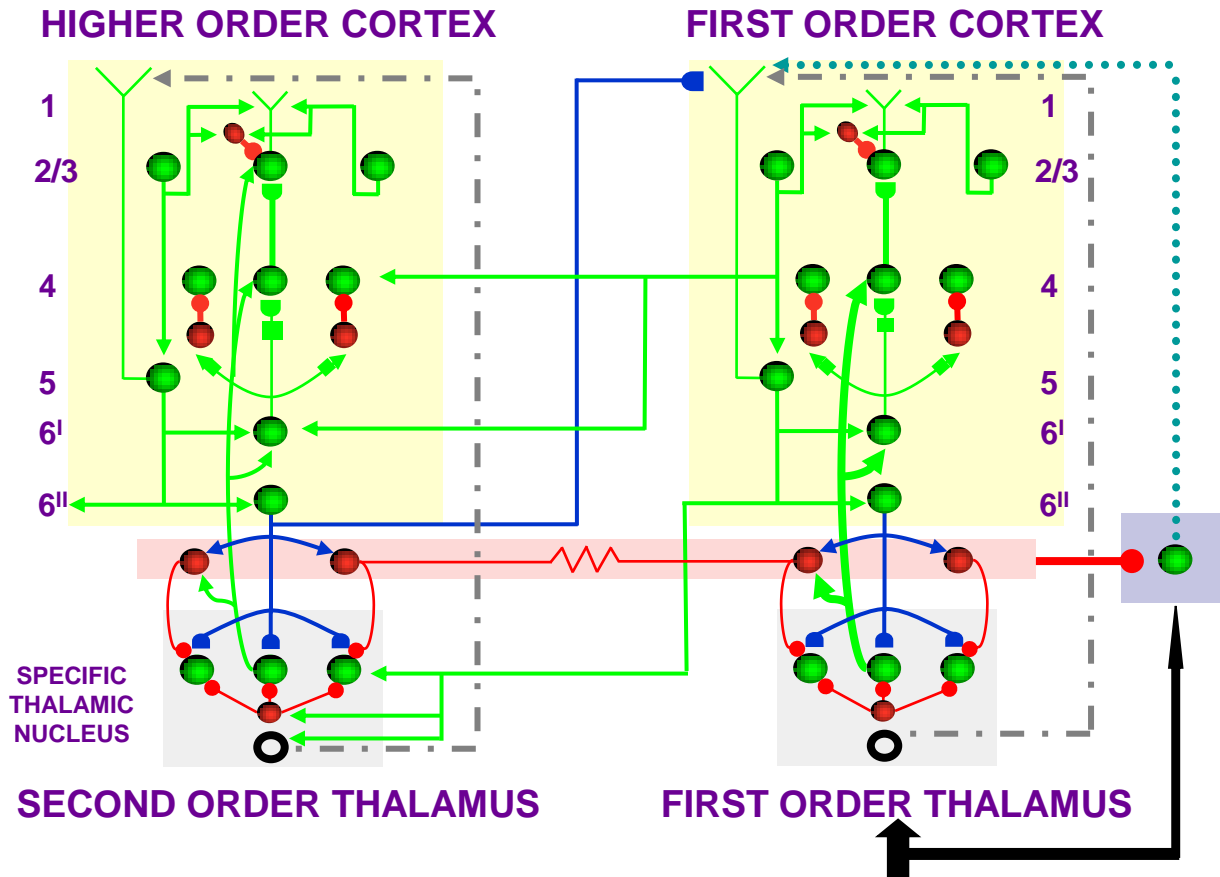


BOSTON UNIVERSITY
Center for Adaptive Systems
CNS Technology Lab



Department of Cognitive and Neural Systems

Gail Carpenter
Stephen Grossberg





FROM COGNITIVE NEUROSCIENCE TO NEUROMORPHIC TECHNOLOGY

We are a leading group in developing new

CONCEPTS

MECHANISMS

MODULES

for

GENERAL-PURPOSE REAL-TIME ARCHITECTURES

that explain how

BRAINS CONTROL BEHAVIOR

and

ADAPT AUTONOMOUSLY IN REAL TIME TO A CHANGING WORLD

Transfer these results to multiple applications in technology

vision and image processing

audition, speech, and language

decision-making and prediction

attentive self-stabilizing incremental learning

cognition, rule discovery, and planning

cognitive-emotional interactions

sensory-motor control and robotics

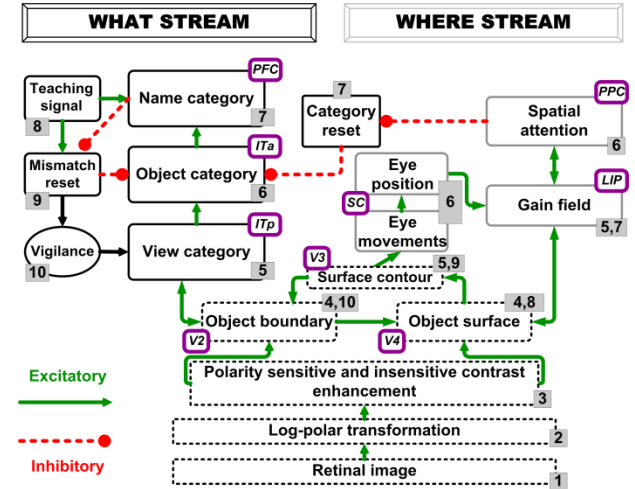
navigation



We and our colleagues have introduced key basic
 equations
 modules
 architectures

that are used in biological neural networks

We are leaders in biological modeling of
 autonomous neural systems that
 carry out complex behaviors
 laminar cortical architectures
 complementary processing streams

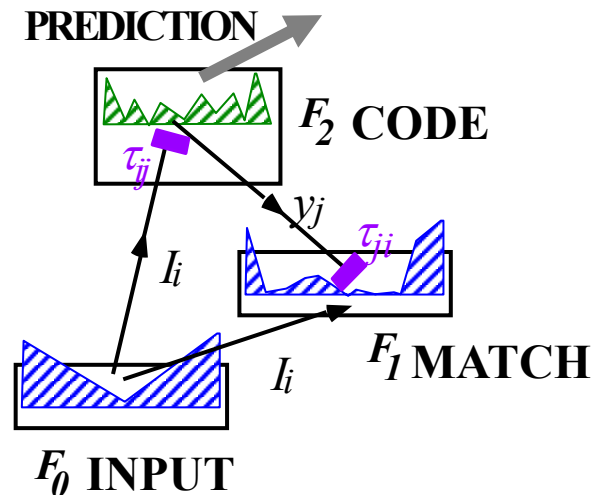


Our algorithms for technology
 are widely used and cited

<http://techlab.bu.edu>

Large-scale applications in
 diverse areas

e.g., remote sensing





We seek to:

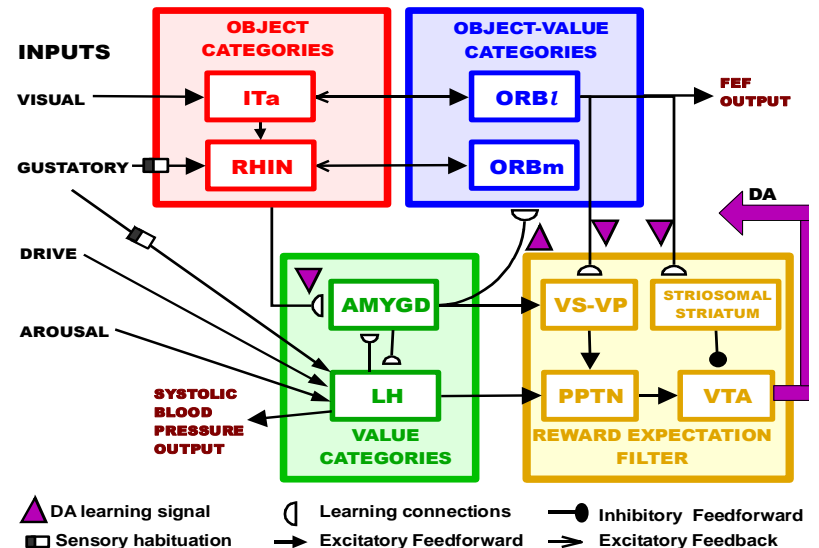
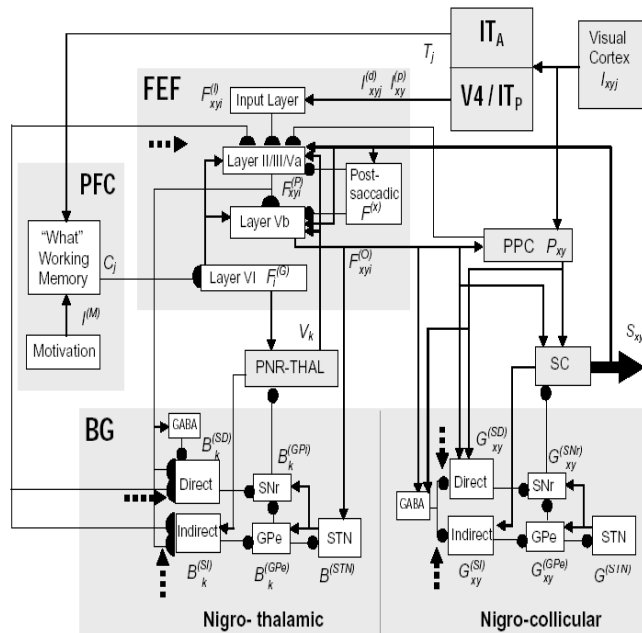
join a team that would manage the project and

take responsibility for deliverables

collaborate in the development of target examples and testbeds

collaborate in the tech transfer process

further develop basic science models related to the project



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