



TWELFTH ANNUAL
WINTER CONFERENCE
ON
THE NEUROBIOLOGY OF
LEARNING & MEMORY
AT PARK CITY

January 9-12, 1987
Aston-Genesis Resort
Park City, Utah



GENERAL INFORMATION

REGISTRATION FEE: \$50.00 - There is a reduced fee of \$30.00 for graduate students and/or postdoctoral fellows. Payable in advance or at registration, Saturday, January 9, from 3:00-3:45 PM outside of Coalition Conference Rooms 1 & 2.

BACKGROUND INFORMATION: The "Twelfth Annual Neurobiology of Learning and Memory Conference" was organized by Carol Barnes, Raymond Kesner, Jim McGaugh, Bruce McNaughton, Aryeh Routtenberg, and Larry Squire; and is supported in part by the Department of Psychology, University of Utah. Everyone is encouraged to participate.

Support for this conference is provided by the Office of Naval Research.

MEETING LOCATION:

Aston-Genesis Resort, Park City, Utah
(Formerly Prospector Square Hotel)
Coalition 1 & 2 Conference Rooms

TRANSPORTATION:

Transportation from Salt Lake City International Airport to Park City (approximately 40 miles) is available in all forms: bus, limousine, cab, rental car, etc.

Aston-Genesis Resort provides a courtesy shuttle bus during peak periods to the ski area and downtown Park City. The fare is free and times vary with demand. Inquire at the hotel desk for further information.

Park City offers a ski shuttle service from the ski area to area hotels. The fare is free and the shuttle departs the ski area on the hour and every 20 minutes with the exception of no run at 2:00 PM.

CONFERENCE SCHEDULE

SATURDAY, JANUARY 9

3:00 - 3:45 PM - Registration

3:45 - 4:00 PM - Introduction

4:00 - 6:30 PM -- SESSION 1: DOES THE AMYGDALA REALLY PLAY A ROLE IN MEMORY? -- Session Leader: Ray Kesner

There have been many suggestions concerning the exact nature of the amygdala contribution to memory. Based on neuroanatomical, recording, and lesion data, we will attempt in this session to explore whether there is a consensus that the amygdala does contribute to memory and if so, the nature of its contribution.

<u>Speakers</u>	<u>Discussion Initiators</u>
Joseph LeDoux	Michael Davis
Jim McGaugh	Michela Gallagher
Bruce Kapp	Ray Kesner
Elisabeth Murray	Stuart Zola-Morgan

6:30 - 7:30 PM - PIZZA PARTY
Location: Outside Coalition
Rooms 1 & 2

7:30 - 10:00 PM -- SESSION 2:
OVERVIEW OF ALZHEIMER'S DISEASE:
GENETIC, METABOLIC AND ENVIRONMENTAL
FACTORS. -- Session Leader: Aryeh
Routtenberg

The session reviews selected clinical approaches and biological parameters related to Alzheimer's disease. One emerging theme is that rapid advances in neurobiology and its technology is being applied with increasing success in the analysis of the root causes of the disorder.

<u>Speakers</u>	<u>Discussion</u> <u>Initiators</u>
Ken Kosik	William Pendlebury
Thomas Chase	Paul Solomon
Jacob Fox	Harvey Altman
John Growdon	Steven Zornetzer

SUNDAY, JANUARY 10

5:00 - 7:30 -- SESSION 3: THE ROLE
OF THE CAUDATE IN LEARNING AND
MEMORY. -- Session Leader: Norm
White

The mediation of memory functions by the caudate nucleus is suggested by studies using electrical stimulation, lesions and neurochemical manipulation. The session will begin with a comparison of the roles of the caudate nucleus and the hippocampus in memory. The second part of the session will deal with the neurochemistry and anatomy of memory functions of the caudate.

<u>Speakers</u>	<u>Discussion</u> <u>Initiators</u>
Richard Hirsh	Lynn Nadel
Ian Wishaw	James McGaugh
Roberto Prado-Acala	
Norman White	
Derek van der Kooy	David Amaral

7:30 - 9:00 PM -- Cocktail Party at
Condominium -- Dinner on your own

MONDAY, JANUARY 11

4:00 - 6:00 PM -- SESSION 4: BEYOND
THE TRISYNAPTIC LOOP. -- Tutorial:
David Amaral, Menno Witter, &
Christer Kohler

The session is intended to be a tutorial on our current understanding of hippocampal neuroanatomy. Menno Witter, David Amaral and Christer Kohler will be talking, respectively, about entorhinal cortical projections, the topographic organization of intrinsic hippocampal connections and transmitter specific neural systems in the hippocampal formation. The general theme of the session will be information flow through the hippocampal circuit.

6:00 - 8:00 PM -- Dinner on your own.

8:00 - 10:30 PM -- SESSION 5: SLEEP
AND MEMORY. -- Session Leaders:
Harvey Altman & William Fishbein

There has been a growing body of data which suggests an important relationship between sleep, specifically REM or paradoxical sleep, and memory. The purpose of this session is to review and critically evaluate the significance of the findings generated from studies in animals and man regarding this relationship.

Speakers

Vincent Bloch
Carlisle Smith
William S. Stone
Irwin Feinberg

Discussion

Initiators

Paul Gold
William Fishbein
Howard Normile
Steven Ferris

SYMPOSIUM 12

5:00 - 7:30 PM -- SESSION 6:
CONSENSUS ON THE HIPPOCAMPUS? --
Session Leader: Rob Sutherland

Is there sufficient empirical and theoretical agreement to permit the emergence of a consensus on the contribution of the hippocampal formation to memory? This issue will be addressed in four attempts to integrate lesion, recording, and neuroanatomical evidence from primate and nonprimate species.

<u>Speakers</u>	<u>Discussion Initiators</u>
Michael Gabriel	John Moore
David Olton	Len Jarrard
Rob Sutherland	John Disterhoff
Larry Squire	John O'Keefe

7:30 - 7:45 PM -- A Tribute to Graham
Goddard and a Tribute to Art Cherkin

7:45 - 8:00 PM -- Business Meeting

8:00 - 11:00 PM -- Dinner at Grub
Steak Restaurant

SOCIAL ACTIVITIES:

1. Saturday, January 9, 6:30-7:30 PM -- Catered Pizza Party --
Included in registration fee.
Nonregistered guests are \$5.00,
payable in advance
Location: Outside of Conference Rooms.
2. Sunday, January 10, 7:30-9:00 PM -- Cocktail (wine & cheese) Party
Location: Condominium
3. Monday, January 11, (time to be announced) -- Free bus transportation to Alta/Snowbird for a day of skiing. Lift tickets to be purchased separately. Sign up at registration desk.
4. Tuesday, January 12, approx. 10:00 AM Ski Race at Deer Valley -- Sign up at registration desk. Details will be provided at the conference as to cost, time, and where to meet.
5. Tuesday, January 12, 8:00-11:00 PM -- Buffet Dinner at Grub Steak \$15.00 per person, payable in advance or at registration. Please sign up on Saturday, so the restaurant can provide enough food for all who want to attend. Prizes awarded for ski-race winners

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