神経化学

日本神経化学会事務局報〔10〕

日本神経化学会会則

昭和55年5月

日本神経化学会事務局報

〔10〕

1. 理事会議事録

○昭和５４年度第１回理事会

と　き：昭和５４年２月１０日

ところ：慶応義塾大学医学部生理学教室
会議室

出席者

理事：塚田裕三，黒川正則，早石　修
平野修助，柿本泰男，垣内史朗
高坂睦年，永田　豊（世話人代表）
永津俊治，佐武　明，高垣玄吉郎
高橋　良，植村慶一

監事：山川民夫

欠席者

理事：大月三郎，吉田　博

監事：成瀬　浩

1）第２２回日本神経化学会実施案

世話人代表・高垣玄吉朗（都神経科学研）より実施案が示され，討議の後，下記の如く決定した。

期　日：昭和５４年１１月１６日(金)
１７日(土)

ところ：日本都市センター

原稿〆切：８月３１日(金)

審査会：９月２２日(土)

2）第２２回神経化学会プログラム編成専門委員を下記１０氏に委嘱した。

永井克孝　（都老人研）
嶋津　孝　（都精神研）
黒田洋一郎　（都神経科学研）
奥山典生　（都立大・理）
田代朋子　（東大・脳研）
日高弘義　（三重大・医・薬理）
宮本侃治　（国立神経センター）
三木直正　（金沢大・癌研・薬理）
高井義美　（神戸大・医・生化）
小笠原信明　（愛知コロニー）

○昭和５４年度第２回理事会

と　き：昭和５４年９月２２日(土)

ところ：野口英世記念会館（東京）

出席者

理事：塚田裕三，黒川正則，平野修助
柿本泰男，垣内史朗，高坂睦年
永田　豊，永津俊治，佐武　明
高垣玄吉郎，高橋　良，植村慶一
吉田　博

欠席者：早石　修，大月三郎

1）庶務会計報告

昭和５３年９月１日～昭和５４年８月３１日までの決算報告がなされた。

昭和５４年度決算報告
（５３.９.１～５４.８.３１）

収　入		支　出	
一般会費	1,986,500	事務局事務員謝金	825,000
賛助会費	660,000	事務員退職手当	250,000
抄録集売上	2,382,980	事務局交通費	126,900
学会参加費	565,500	事務局アルバイト代	523,340
雑収入（欧文抄録代含）	56,540	印刷代（事務局報印刷代金）	844,850
小　計	5,651,430	抄録集印刷代	899,000
前年度繰越金	302,856	学会運営費	500,000
		会議費（旅費含）	168,460
		通信連絡費	437,170
		事務雑費	38,211
		小　計	4,612,931
		次年度繰越金	1,341,355
合　計	5,954,286	合　計	5,954,286

昭和54年9月1日～昭和55年8月31日までの予算案が塚田理事長より示され，これを承認した。

昭和55年度予算案

（54.9.1～55.8.31）

一般会費	2,250,000(@2,500×900)	事務局事務員謝金	850,000
賛助会費	660,000	事務員退職手当	50,000
抄録集売上	2,475,000(@4,500×550)	事務局交通費	150,000
学会参加費	600,000	事務局アルバイト代	600,000
雑収入（欧文抄録代含）	100,000	印刷代（事務局報印刷代含）	1,050,000
小計	6,085,000	抄録集印刷代	1,200,000
前年度繰越金	1,341,355	学会運営費	600,000
		会議費（旅費含）	680,000
		通信連絡費	500,000
		事務雑費	100,000
		予備費（昭和54年度学会運営追加分と理事選挙費積立金）	300,000
		小計	6,080,000
		次年度繰越金	1,346,355
合計	7,426,355	合計	7,426,355

庶務報告

退会者：27名
新入会社：37名
} 現会員数：987名

2）第22回日本神経化学会開催の件

学会の詳細な日程が世話人代表高垣玄吉郎氏から報告された。

学会会期：昭和54年11月16日(金)
17日(土)

理事会：11月15日(木)夜

評議員会：11月17日(土)12：00

総会：11月17日(土)（13：00）

参加費　会員　2,000円
非会員3,000円

抄録代　会員　4,500円
非会員5,500円

尚，11月16日(金)（6：20～　）に懇親会が予定されている。

3）第23回（昭和55年度）日本神経化学会の件

第23回は世話人代表として柿本泰男氏（愛媛大・医・精神）のもとに行われることが決定され粗案が提出された。

ところ：奥道後ホテル

とき：昭和55年11月13日(木)
14日(金)
15日(土)

4）第24回日本神経化学会は長崎を第1候補にすることが決められた。

○昭和54年第3回理事会

とき：昭和54年11月15日

ところ：ストックホルム（六本木・東京）

出席者

理事：塚田裕三，黒川正則，早石　修
平野修助，柿本泰男，垣内史郎
高坂睦年，永田　豊，永津俊治
大月三郎，佐武　明，高垣玄吉郎
高橋　良，植村慶一，吉田　博

監事：山川民夫

1）庶務会計報告

昭和54年度決算報告書につき監事より承認の印を受けたとの報告が塚田理事長よりあり，理事会はこれを認めた。さらに，

昭和５５年度予算案が理事長より提出され，これを承認した。

2）次期開催地の件

昭和５５年度第２３回日本神経化学会運営案が柿本泰男氏より示された。

(案)

世話人代表　柿本泰男（愛媛大・医・精神）

と　き：昭和５５年１１月１３日(木)
１４日(金)
１５日(土)

ところ：奥道後ホテル

○昭和５５年度第１回理事会

と　き：昭和５５年２月９日

ところ：慶応義塾大学医学部生理学教室会議室

出席者

理事：塚田裕三，黒川正則，平野修助
柿本泰男，垣内史郎，高坂睦年
永田　豊，永津俊治，大月三郎
佐武　明，高垣玄吉郎，高橋　良
植村慶一，吉田　博

監事：成瀬　浩

欠席者：早石　修，山川民夫（監事）

1）第２３回日本神経化学会実施案

世話人代表・柿本泰男（愛媛大・医・精神）より実施案が示され討議の後，下記の如く決定した。

期　日：昭和55年11月14日(金)，15日(土)

ところ：奥道後ホテル

原稿〆切：８月１６日(土)

審査会：９月６日(土)10：00　於野口英世記念会館

尚11月13日(木)午後より前夜祭を開催する予定

講演者（予定）

① Dr. Marshall Nirenberg
Chief, Labratory of Biochemical genetics, Natinal Heart, Lung and Blood Institute, National Institutes of Health, Bethesda, Maryland 20014, USA.

② Dr. A. Guidotti
Laboratory of Preclinical Pharmacology, National Institutes of Mental Health Washington, D.C. USA.

③ Dr. R. Carraway
Department of Physiology and Laboratory of Human Reproduction and Reproduction Biology,
Harvard Medical School,
Boston, Massachusetts, USA.

2）第２３回日本神経化学会プログラム編成専門委員を下記１１氏に委嘱した。

玉井洋一　（北里大・医・生化）
三宅正治　（愛媛大・医・精神）
出口武夫　（都神経科学研）
内田修次　（阪大・医・薬理）
内村英幸　（国立肥前療養所）
野村靖幸　（広大・医・薬学）
加藤　武　（東工大・総理工・生命科学）
加藤尚彦　（東大・医・脳研）
小川紀雄　（岡大・医・内科）
阿部輝雄　（新大・脳研・神経）
笠井久隆　（都立大・理・化学）

3）第２４回日本神経化学会は高橋　良氏（長崎大・医・精神）を世話人代表として長崎で開催されることを決定した。尚期日は昭和５６年１１月下旬（１９，２０，２１日或いは２６，２７，２８日）の予定。

4）本年度は日本神経化学会の理事の改選が行われるため次の三氏が選挙管理委員に委嘱された。

黒田洋一郎　（都神経科学研）
仮屋哲彦　（東医歯大・医・精神）
野口鉄也　（慶応大・医・生理）

2. 評議員会議事録

○昭和５４年度評議員会

と　き：昭和５４年１１月１７日(土)

ところ：日本都市センター

昭和５４年度総会に提出される議案につ

き塚田理事長より諮問があり，これを理事会案通りに認めた。

3. 総会議事録

○昭和５４年度総会

と　き：昭和５４年１１月１７日(土)

ところ：日本都市センター

議　長：高垣玄吉郎

1）庶務会計報告

昭和５４年度決算報告が提示され承認された。つづいて昭和５５年度予算案が提示され承認された。

尚現会員数　９５０名

昭和５４年度の新入会員数　３７名

退会者数　２７名

特別会員　５名（内新１）

賛助会員　１２社（内新１）

2）プログラム編成報告

本年度の応募件数　１０８件

採用不可となったもの　１４件

採用演題　９４件

3）次期学会世話人および開催地の件

第２３回日本神経化学会は世話人代表・柿本泰男氏（愛媛大・医・精神）のもとに松山で行われることが承認された。

と　き：昭和５５年１１月１４日(金)

１５日(土)

ところ：奥道後ホテル（松山）

4 第22回日本神経化学会プログラム編成委員会報告

と　き：昭和５４年９月２２日(土)

ところ　野口英世記念会館

出席者

理事：塚田裕三，黒川正則，早石　修
柿本泰男，平野修助，垣内史郎
高坂睦年，永田　豊，永津俊治
大月三郎，佐武　明，高橋　良
植村慶一，吉田　博，高垣玄吉郎

プログラム専門委員：永井克孝，
嶋津　孝，黒田洋一郎，奥山典生
田代朋子，日高弘義，宮本侃治
三木直正，高井義美，小笠原信明

1）本年度の応募件数　１０８件

2）各応募原稿につき２名の査読者が決められ，採用，保留，不可の３段階に分け審査が行われた。

3）採用不可となったもの　１４件

4）採用したもの　９４件

第１日目を３会場，第２日目を２会場の使用によって配分し，プログラム編成を行った。

5. 第22回日本神経化学会プログラム

＜世話人代表＞　高垣玄吉郎

＜日　時＞　昭和54年11月16日(金)
17日(土)

＜会　場＞　日本都市センター

第1日　11月16日(金)

●A会場

10:00～12:00

1．ラット脳内多様性MAOの基質特異性について
……杵鞭宏育，和久井淑子，林　誠夫，豊島良枝，上條一也(昭和大・医・薬理)

2．A型B型モノアミン酸化酵素に対するフェニルエタノールアミンの基質特異性・基質濃度の影響
……鈴木 修，服部秀樹(浜松医大・法医)

3．ラット視床下部各核レベルにおけるモノアミン酸化酵素活性の日内変動
……釜瀬春隆，挟間秀文，国元憲文，川原隆造，水川六郎(鳥取大・医・神経精神)

4．Tryptophan 5-monooxygenaseの活性化と新しい活性化物質の作用機作
……堀　真一郎，大谷幸子(都神経研)

5．ラット脳幹のトリプトファン水酸化酵素の活性化と細胞質タンパクのリン酸化における
Ca^{2+}Dependent Regulator Proteinの役割
……山内　卓，藤沢　仁(旭川医大・I生化)

6．ラットにおけるmethamphetamine常同行動の逆耐性現象に対応する脳内tyrosine水酸化酵素の変動
……西川　徹，渡部修三，高嶋瑞夫，融　道男(国立神経センター)

12:00～13:00　―― 昼　　食 ――

13:00～15:00

7．^{3}Hジヒドロエルゴクリプチンの結合実験によるラット脳α受容体サブタイプの同定
……芳賀達也，芳賀和子(浜松医大・生化)

8．dopamine受容体とspiroperidol受容体の差異
……山脇泰秀，小川紀雄，大藤　真(岡大・医・III内)

9．中枢セロトニン・レセプターの感受性と抗うつ剤
……水田　正(日本ケミファ研)，野村靖幸，瀬川富朗(広大・医・総合薬)

10．脳内モノアミン代謝に対するクロルプロマジンの作用
……三船和史，盛政忠臣，土井 亨，庄盛敏廉(岡大・医・脳研)

11．拘束ストレス状況におけるラット脳内各部位のNoradrenaline代謝の変化
……田中正敏，河野康子，中川良一，戸島信夫，長崎信行(久留米大・医・薬理)

12．中枢各ドーパミン・ニューロン系(A8～A14)のHVA濃度とhaloperidolの影響
……松本　孝，内村英幸，平野　誠，金　長寿(国立肥前療養所)，中原辰雄(九大・理)

15:00～15:20　―― 休　憩 (20分) ――

15:20～18:00

13．3,4-Dihydroxyphenylethylene glycol(DOPEG)及びその硫酸抱合体の蛍光定量法と脳内NE代謝系における意味について
……古川　清，唐沢忠彦，吉田耕一，清水当尚(大日本製薬総研)

14. ミクロゾームによるハイドロキシインドール化合物の代謝とその代謝産物の膜蛋白への不可逆的結合
……植村富彦，嶋津　孝，堀田直樹(都精神研)
15. Radioreceptor assayによるベンゾジアゼピン血中濃度の測定
……清水宏俊，本田雅子，小田切脩(日本ロシュ研)
16. 中枢catecholamine神経系synapse機能の発生，発育とmethamphetamineの作用
……野村靖幸，大木恵子，四元郁子，瀬川富朗(広大・医・総合薬)
17. ラット小脳の2種のRNase Hとそれらの機能
……塚田欣司，斉藤順子，沢井保子，沢崎嘉男，中島　熙(東医歯大・難研)
18. ラット小脳チミジン・キナーゼ・アイソザイムと分離プルキンエ細胞における特異性
……沢崎嘉男，山田則子，関　啓子，中島　熙(東医歯大・難研)
19. Elマウス脳ポリゾームのポリ(A^+)-RNA合成におよぼす痙攣の影響
……山上　栄，大野京介，森　浩一，辻　正記，川北幸男(阪市大・医・神経精神)
20. Dihydropteridine ruductase欠損症
……成沢邦明，多田啓也(東北大・医・小児)

第1日　11月16日(金)

●B会場

10:00～12:00

21. 分離ニューロンおよびグリア細胞群の環状ヌクレオチド合成酵素の活性化の相違
……安藤正人，難波経篤，永田　豊(保健衛生大・医・生理)，北島哲子，中沢欽哉(愛知コロニー)
22. ラット脳Guanylate Cyclaseの性質について
—— ニトロソグアニジンに対する反応性の差異について ——
……吉川和明，栗山欣弥(京府医大・薬理)
23. 牛脳可溶性Guanylate Cyclaseの精製とそれに対する抗体の生成とその性質について
……中根正樹，出口武夫(都神経研・医化)
24. ラットの松果体におけるcyclic AMP含量の日内変動
三国雅彦，斉藤嘉郎，小山　司，岡　五百理，松原繁宏，加沢鉄士，浅野　裕，山下　格(北大・医・精神)
25. てんかんとモノアミン代謝及び環状ヌクレオチド
……長尾卓夫，藤本　明、山本光利、秋山一文，大月三郎(岡大・医・精神)
26. 各種神経疾患髄液中のモノアミン代謝物質と環状ヌクレオタイド
……山本光利，長尾卓夫，藤本　明，秋山一文，大月三郎(岡大・医・精神)
早原敏之，難波玲子(国立岡山療養所)

12:00～13:00　　—— 昼　　食 ——

13:00～15:00

27. 脳腫瘍組織及び切截脳におけるLysosome酵素の変動とDBc-AMPの効果に関する研究
……柴田家門，清水義勝，松元幹郎，長沢貞継，高須信美(東邦大・医・脳外)
阿相皓晃，平野修助(同・II生理)
28. ラット脳のadenosine kinaseについて
……山田裕一，後藤治子，小笠原信明(愛知コロニー)
29. 脳のアデノシン結合蛋白(II)
……小田切　脩，逸見順子，清水宏俊(日本ロシュ研)
30. シナプス伝達におけるアデノシン関連物質の生理作用とその分子機構(II)
—— 神経終末部におけるサイクリックAMPの上昇を介する神経伝達のfacilitationの可能性
……黒田洋一郎，小林和夫(都神経研・生化)
31. Ca^{2+}生体膜リン脂質依存性蛋白質リン酸化酵素の活性化様式
……川原康洋，水口龍次，吉川　潮，森　光寿，岩佐　寧，岸本　明，高井義美(神大・医・II生化)

32. ラット大脳シナプス膜画分からの酸性カルシウム結合タンパク質の単離とその性質
……中村泰治，中浜隆之，中谷一泰(昭和大・薬・生物)，竹田　稔(同・医・生化)

15:00～15:20　　—— 休　　憩 ——

15:20～18:00

33. 脳の顆粒性モジュレーター結合蛋白の可溶化と部分精製
……祖父江憲治，村本芳彦，垣内史朗(阪大・医・高次研)

34. 視細胞杆体細胞への^{45}Caの取り込み —— ATP-induced ATP-dependent Ca-uptake ——
……郭　哲輝，林　要喜知，秋山万里子，三木直正(金大・がん研・薬理)

35. 牛脳の Phosvitin kinase FIIについて
……公文　明，小沢雅子(都精神研・神経化学)

36. 糖液による副腎髄質ホルモンの開口放出：外液Caイオン依存性
……反町　勝(愛媛大・医・生理)

37　シナプス小胞分画のプロトン(H^+)ポンプ機構について
……都築紀宏(名市大・医・生化)

38. シビレエイ電気器官の神経終末におけるコリン輸送
……阿部輝雄，西須英雄，藤田省三(新大・脳研・神経化学)

39. Synaptosome形質膜のNa,K-ATPase活性に対するascorbateの阻害作用
……後藤香糸子，田中　亮(名市大・医・生化)

40. 虹彩のムスカリン様アセチルコリン受容体の生理機能と遮断薬の特異的結合について
……松田友宏，樋口宗史，吉田　博(阪大・医・I薬理)

第1日　11月16日(金)

●C会場

10:00～12:00

41. ミエリン塩基性蛋白の酵素イムノアッセイについて
……四宮由美子，加藤進昌，今澤正興，宮本侃治(国立神経センター)

42. ミエリンよりの塩基性蛋白－酸性脂質複合体の単離・同定・生物活性
……国下龍英，武富　保(信大・順応研・生化)

43. ウシ末梢神経ミエリンのPASII糖蛋白より得られた糖ペプチドについて
……北村邦男，鈴木　勝，植村慶一(埼玉医大・I生理)

44. 末梢神経ミエリン糖蛋白の脂質中間体経由のグリコシル化について
……植村慶一，堀江賀与子，北村邦男(埼玉医大・I生理)

45. 2′, 3′-cyclic nucleotide 3′-phosphodiesteraseの可溶化，精製および精製標品の性質
……栗原　正，西沢芳子，高橋康夫(新大・脳研・神経薬理)

46. 培養小脳組織によるミエリン形成の神経化学的研究
……長池一博，塚田裕三(慶大・医・生理)

12:00～13:00　　—— 昼　　食 ——

13:00～15:00

47. Shiverer ミュータントマウスの神経系のミエリン形成と
2′, 3′-cyclic nucleotide 3′-phosphohydrolase活性との相関について
……御子柴克彦，長池一博，高坂新一，高松　研，塚田裕三(慶大・医・生理)

48. Snell下垂体性こびと症マウスの神経化学的研究
……野口鉄也，杉崎哲朗，塚田裕三(慶大・医・生理)

49. S-100タンパク質の化学構造と分子進化
……礒辺俊明，石岡憲昭，奥山典生(都立大・理・化)

50. 培養rat glioma (C-6) 細胞のcyclic AMP induced differentiationにおける
S-100蛋白質量の経時的変化
……古田知久，則兼　博，守屋芳夫，坪井雅弘，田渕和雄，西本　詮(岡大・医・脳外)
51. 実験的梗塞脳におけるS-100 proteinの経時的変化
……守屋芳夫，古田知久，原田泰弘，岸川秀実，田渕和雄，西本　詮(岡大・医・脳外)
52. ブタ脳中に存在する新しい酸性タンパク質
……石岡憲昭，磯辺俊明，奥山典生(都立大・理・化)，野又康博，和田　博(阪大・医・II薬理)

15:00～15:20　　—— 休　　憩 ——

15:20～18:00

53. 脳におけるプロスタグランジンD_2の代謝と機能
……清水孝雄，渡部紀久子，早石　修(京大・医・医化)，水野　昇(同・解剖)，天野武彦(三菱生命研)
54. スケトウダラ神経組織における糖脂質組成の特異性
……玉井洋一，堀地　肇(北里大・医・生化)，斉藤信太郎(国立武蔵療養所)
55. 脳燐脂質分子種に関する研究
……荻野広太郎，木野　稔，近藤哲夫，蒲生昌仁，里内　清，斉藤国彦(関西医大・医化)
56. galactocerebrosidase (EC 3. 2. 1. 46)の酵素的微量測定法
……加藤尚彦(東大・医・脳研)，鈴木義之(同・小児)
57. ヒト脳およびラット脳におけるlipase活性について
……関口　茂，衛藤義勝(慈恵医大・小児)
58. GM_3ガングリオシドシアリダーゼに関する研究
……田端葉子(自治医大・神経内科)，山田剛通，有賀敏夫，宮武　正(都臨床医研)
59. 正常並びにKrabbe病脳に於けるHexadecanoyl 4-nitrophenyl-β-galactosidase活性に関する研究
……衛藤義勝(慈恵医大・小児)
60. 脱コレステロール剤AY9944で処理したラット新生仔中のスフィンゴミエリナーゼ活性変化の年令依存性と可逆性
……渡辺和行，桜川宣男，有馬正高(国立神経センター)

第2日　11月17日(土)

●A会場

9:00～10:20

61. 脳可塑性の生化学的研究－大脳半球摘除ラット神経組織のNA, 5HTの変化について
……外山　孚，村上直人，亀山茂樹，植木幸明(新大・脳研・脳外)，佐武　明(新大・脳研・神経化学)
62. ラット脳の外套，小脳，脳幹の可溶性蛋白質の発育過程における組成変化・二次元電気泳動による分析
……吉田　豊，高橋康夫(新大・脳研・神経薬理)
63. 網膜内ドーパミン作働性ニューロンの成長過程に関する蛍光組織化学的研究・
正常および遺伝盲動物における比較検討を中心として
……加藤　聖，根岸晃六(金大・医・神経情報研)
64. ヒヨコ網膜の発育に及ぼす光遮断の影響
……高坂新一，高松　研，御子柴克彦，塚田裕三(慶大・医・生理)

10:20～10:40　　—— 休　　憩 ——

10:40～12:00

65. トリプトファンのラット脳内インドールアミン代謝系及び弁別学習能力におよぼす影響
……野村正彦(保健衛生大・医・生理)
66. 6－ハイドロオキシドーパミンの新生仔期投与の対照及びMAMラットにおける
脳内カテコールアミン量と成長に及ぼす影響
……田丸政男，永吉道子，中原　務，松谷天星丸(保健衛生大・医・総医研)，塚田裕三(慶大・医・生理)

67. 老齢ラットの脳内モノアミンに与えるMeclofenoxate hydrochloride及びCiticolineの影響
……土井　亨，盛政忠臣，三船和史，庄盛敏廉(岡大・医・脳研)
68. 発生中のニワトリ骨格筋におけるアセチルコリンリセプターの等電点
……石川裕二，嶋田　裕(千大・医・解剖)

12:00～13:00　—— 昼食(評議員会) ——

13:00～13:30　—— 総 会 (A会場) ——

〔議　題〕　1．庶務・会計報告　　2．プログラム編成報告　　3．昭和54・55年度決算・予算承認の件
4．次期学会世話人および開催地の件　　5．その他

13:40～15:20
69. マウス扁桃体におけるα-ブンガロトキシン結合活性の性差およびその生後発生
……有松靖温，瀬戸章子，天野武彦(三菱生命研)
70. 筋細胞から遊離される脊髄成長促進因子
……田中英明，小幡邦彦(群大・医・薬理)
71. ニューロブラストーマ・グリオーマ雑種細胞の分裂増殖とシナプス形成に対するグリア成長因子の効果
……東田陽博(名大・環研)，加藤泰治(名市大・医・生化)，三宅彰英(岐大・医・反射研)
田中恭子(愛知ガンセンター)，田中　亮(名市大・医・生化)，田中達也(愛知ガンセンター)
72. ニューロブラストーマ・グリオーマ雑種細胞のα-アドレナリン性受容体
……東田陽博(名大・環研)，杉山博之(生理研)，芳賀和子，芳賀達也(浜松医大・生化)
73. ラットグリオーマ由来の細胞(C-6)におけるN^G, N^G-ジメチルアルギニンを含む蛋白質の合成と分解
……平井基陽，中嶋照夫(阪大・医・高次研)

15:20～15:40　—— 休　　憩 ——

15:40～17:00
74. アルブミン結合型ビリルビンの培養神経系細胞に対する毒性
……加藤泰治，*鬼頭秀行，福井陽子，田中　亮(名市大・医・生化，*小児)
75. Gunnラットの小脳の神経化学的研究
……御子柴克彦，高坂新一，高松　研，塚田裕三(慶大・医・生理)
76. 高ビリルビン血症Gunnラット：小脳の2′, 3′-cyclic nuclectide-3′-phosphohydrolaseと小脳低形成によるタンパクパターンの変化について
……仙波りつ子，青野幸子，青木英子，柏俣重夫(愛知県コロニー)
77. Cytosine Arabinoside投与による小脳形成不全マウスの脳内物質の変化と組織化学
……辻　元宏，岩瀬則文，佐藤啓二，高橋三郎(滋賀医大・精神)，島田司己(同・小児)

第2日　11月17日(土)

●B会場

9:00～10:20
78. フェノバルビタール依存ラット部位別脳におけるアミノ酸量の変化
……青木公子，黒岩幸雄(昭和大・薬・毒物)
79. β-シトリルグルタミン酸のエネルギー代謝における役割
……三宅正治，柿本泰男(愛媛大・医・神経精神)，反町　勝(同・生理)
80. ラット錐体外路系へのカイニン酸の局所微量投与に伴う神経化学的変化について
……栗原悦雄，米田幸雄，栗山欣弥(京府医大・薬理)
81. ラット網膜からのGABAの放出：特にglutamateの影響について
……鎌田芳夫，水野有武(慈恵医大・眼科)，朝倉　正(同・RI研)，松田　誠(同・医化)

10:20～10:40　　—— 休　　憩 ——

10:40～12:00

82. ラット Crude synaptic membrane の Na^+ 依存性 γ- アミノ酪酸結合サイトの性質
……栗岡　晋，松田　誠(慈恵医大・医化)

83. ラット脳粗シナプス膜分画への ^3H-muscimol の結合とその内在性阻害物質について
……米田幸雄，栗山欣弥(京府医大・薬理)

84. D-フェニルアラニンによる針鎮痛有効性個体差の消失
……蜂須　貢，村居真琴，田中正明，久光　正，羅　昌平，武重千冬(昭和大・医・I生理)

85. 培養神経細胞の生産する Substance P-like Immunoreactivity
……畠中　寛，天野武彦(三菱生命研)

12:00～13:00　　—— 昼食(評議員会) ——

13:00～13:30　　—— 総 会 (A会場) ——

13:40～15:20

86. Substance P C-末 heptapeptide の生成酵素とその生理的意義
……加藤　武，浜　登希子，中野　完，小島幸一，永津俊治(東工大・総合理工)

87. 中枢神経組織への Substance P carboxy-terminal heptapeptide (5-11) SPのとりこみ機構の存在について
……仲田義啓，日下歓子，瀬川富朗(広大・医・総合薬)

88. ラット中枢神経 T R H受容体の性状
……小川紀雄，山脇泰秀，大藤　真(岡大・医・III内)

89. 発達過程における脳のポリペプチド延長因子
……村上一行，宮本侃治(国立神経センター)

90. 神経細胞における 10nm フィラメント(ニューロフィラメント)の単離，精製とその蛋白構成
森　啓，黒川正則(東大・医・脳研)

15:20～15:40　　—— 休　　憩 ——

15:40～17:00

91. 分離ニューロンにおける細胞骨格タンパク質の合成
……中山 孝，黒川正則(東大・医・脳研)

92. コルヒチンによるチューブリン輸送の選択的阻害
……小宮義璋，　黒川正則(東大・医・脳研)

93. Neurofilament 構成成分の蛍光抗体法による脳内分布状態の検討と
Alzheimer 原線維変化との関連について
……羽賀誠一，石井　毅，徳武　哲(都精神研)

94. 筋萎縮における筋蛋白の構造変化
……井上良一，佐久間長信，三宅正治，柿本泰男(愛媛大・医・神経精神)

6. 第7回国際神経化学会議（イスラエル）プログラム

INTERNATIONAL SOCIETY FOR NEUROCHEMISTRY

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On behalf of the Program Committee, we wish to thank the following for their financial support:
Fidia Research Laboratories (Italy)
National Foundation — March of Dimes (USA)
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ORGANIZERS

KENES — Organizers of Congresses and Special Events Ltd.
7 Leteris Street
Tel Aviv, Israel
Tel: (03) 255 367 Telex: 341171 KENS IL

GENERAL INFORMATION

LOCATION
The location and headquarters of the Meeting is the Jerusalem Hilton Hotel.
Telephone: (02) 536 151.

LANGUAGE
The Congress will be conducted in English.

DESKS AND OFFICES
From 16.00 hrs. on Sunday, September 2, the following desks and offices will be situated at the Jerusalem Hilton Hotel:
Information / Messages / Registration / Secretariat / Organizing Committee / Projection / Poster / Press / Photography / Travel

MAIL — MESSAGES — MEDICAL ASSISTANCE — LOST PROPERTY
Please apply to the Information Desk.

PUBLIC TELEPHONES
There are public telephones located in the Ballroom Lobby of the Jerusalem Hilton Hotel. Telephone tokens are available at the Information Desk.

BUSES
Almost all buses pass the Central Bus Station which is opposite the Jerusalem Hilton Hotel. Check at your hotel or ask the bus driver.

BANK FACILITIES
Both Bank Leumi le-Israel B.M. and Israel Discount Bank have branches at the Jerusalem Hilton Hotel and are at the service of Meeting participants.

NAME BADGE
Your Meeting Kit contains your name badge, which you are requested to wear whenever you attend sessions or social events. **Without your badge you will be refused admittance.**

LUNCH VOUCHERS
LUNCH VOUCHERS are available from the Information Desk at a specially reduced price of US$ 10.00 (or equivalent). The Lunch Vouchers are color-coded for each day of the Meeting. Please specify the days you require vouchers at the time of purchase.

POSTER PRESENTATIONS
On the day of your poster presentation, please give your poster to the Poster Desk between 08.30 and 11.00 hrs. You will notice in the Program that your poster has been allotted a number. Kindly write that number on the back of your poster.
Poster presenters are expected to be stationed beside their posters for the duration of the session. Posters will be removed at 17.00 hrs. Please be sure that you are in the poster display area at that time to receive your poster as it is removed.

GENERAL INFORMATION (Continued)

PROJECTION EQUIPMENT FOR ORAL COMMUNICATION PRESENTERS
Please hand your slides/movies to the projectionist in the session hall just prior to the commencement of the session. At the conclusion of the session, please collect your slides/movies **immediately** from the projectionist.

LIST OF PARTICIPANTS
A list of participants who registered prior to the Meeting will be displayed on the bulletin board. Please amend/correct/add your name, address and hotel to the list.

ATTENDANCE CERTIFICATES
Certificates are available at the Information Desk for participants who need proof of attendance for income tax or other purposes.
These certificates are only available to those participants who paid registration fees in foreign currency. Please show your receipt at the Information Desk when you request an Attendance Certificate.

BOOK EXHIBITION
A book exhibition will be held within the framework of the Meeting.
RAVEN PRESS, USA, will be displaying a large selection of publications.
HEILIGER & CO., LTD., Israel, are acting as representatives for several publishers of scientific material.

TRAVEL AND ACCOMMODATION
PELTOURS LTD. Congress Department
52 Nahlat Benyamin Street, P.O. Box 394, Tel Aviv
Telephone: (03) 50 851 Telex: 03-3830 Cable address: PELTOURS TELAVIV
Peltours Ltd. is operating a Travel Desk at the Meeting which will be open daily for the duration of the Meeting. They will arrange for participants, tours and excursions by coach, air, private car with guide, rent-a-car, additional hotel accommodation required for the period following the Meeting and reconfirmation of return flight.

RECONFIRMATION OF RETURN FLIGHT
Participants must reconfirm their return flights **at least 72 hours** prior to departure.

EL AL ISRAEL AIRLINES — Official Carrier of the Meeting

	Telephone
32 Ben Yehuda Street, Tel Aviv	(03) 299 333
12 Hillel Street, Jerusalem	(02) 233 333
Special Telephone Numbers:	
Flight Arrivals	(03) 614 656
Flight Departures	(03) 971 461
Reservations and Confirmation	(03) 625 252

SOCIAL PROGRAM

All social events will take place at the Jerusalem Hilton Hotel, unless otherwise stated.

SUNDAY, SEPTEMBER 2, 1979

21.00 Informal Get-together
(Light refreshments will be served)

TUESDAY, SEPTEMBER 4, 1979

20.00 *Reception by the Municipality of Jerusalem at the Israel Museum, followed by a tour of the Museum.
No transportation will be provided to the Museum, but buses will take participants **from** the Museum to their hotels.

WEDNESDAY, SEPTEMBER 5, 1979

22.00 * Sound and Light Show (in English), "A Stone in David's Tower", at The Citadel, Jaffa Gate, the Old City of Jerusalem.
No transportation will be provided.

THURSDAY, SEPTEMBER 6, 1979

20.30 Farewell Evening, featuring the Hora Ne'urim Dance Group, musician Giora Feidman and singer Ruhama Raz.
A Cheese and Wine Buffet will follow the artistic program.
This event is included in the registration fees of participants and registered accompanying persons from abroad. For all students and Israeli participants, the charge is US$ 8.00 (or equivalent). Tickets may be purchased at the Information Desk.

* **These events are for participants from abroad only.**

PROGRAM FOR ACCOMPANYING PERSONS

Accompanying persons, who have registered, are invited to attend all the social events of the Meeting. In addition, the following program has been prepared.

MONDAY, SEPTEMBER 3, 1979

16.00 Buses depart from the Jerusalem Hilton Hotel for a familiarization drive of Jerusalem — the "City of Gold".
Return at approximately 18.00 hrs.

21.00 Accompanying Persons' Informal Reception, hosted by
The Women Friends of the Hebrew University at Beit Maiersdorf,
Mt. Scopus Campus of the University.
Buses will depart from the Jerusalem Hilton Hotel at 20.30 hrs.

TUESDAY, SEPTEMBER 4, 1979

08.30 Arts and Crafts Tour — includes pottery making, glass blowing, weaving, fashioning of copperware and other creative displays.
Return at approximately 13.00 hrs.

WEDNESDAY, SEPTEMBER 5, 1979

08.30 Depart from the Jerusalem Hilton Hotel for a half day tour of the Dead Sea.
Drive from Jerusalem through the spectacular Judean Hills, descend 392 meters (1286 feet) below sea level to the lowest spot on earth.
Please take your bathing suit in order to experience a unique dip in the Dead Sea.
Return at approximately 13.00 hrs.

THURSDAY, SEPTEMBER 6, 1979

08.30 Buses depart for a tour of Yad Vashem — memorial to the victims of the Holocaust
Followed by a visit to a kibbutz — a close-up view of this world-renowned social experiment.
Return at approximately 13.00 hrs.

POST-CONGRESS SATELLITE SYMPOSIA

NEUROCHEMISTRY AND CLINICAL NEUROLOGY

ISTANBUL, TURKEY, SEPTEMBER 8—10, 1979

Organizers: **L. Battistin,** Italy
S. Gabay, USA
G. Hashim, USA
A. Lajtha, USA
A. Songar, Turkey

SEROTONIN: CURRENT ASPECTS OF NEUROCHEMISTRY AND FUNCTION

ATHENS, GREECE, SEPTEMBER 11—16, 1979

Organizers: **S.G.A. Alivisatos,** Greece
J.R. Boissier, France
C.L. Cazzullo, Italy
S. Gabay, USA
B. Haber, USA
M.R. Issidorides, Greece
A. Vernadakis, USA

MONDAY, SEPTEMBER 3, 1979

09.00—12.15 **Hall A**

09.00

OPENING SESSION

Chairman: **Prof. Shimon Gatt,** Chairman, Local Organizing Committee Seventh International Meeting of the International Society for Neurochemistry

Greetings: **Prof. G. Brian Ansell,** Chairman, International Society for Neurochemistry

Prof. Arieh Dvoretsky, President, The Israel Academy of Sciences and Humanities

Prof. Rafael Mechoulam, Rector, The Hebrew University, Jerusalem, Israel

Prof. Bernard W. Agranoff, Chairman, Program Committee, Seventh International Meeting of the International Society for Neurochemistry

09.30 **REPORT OF SATELLITE MEETINGS**

Chairman: **G. Brian Ansell,** Chairman, International Society for Neurochemistry

09.30 AGEING OF THE BRAIN AND DEMENTIA
Florence, Italy, August 27—29, 1979
Organizers: **A.N. Davison,** UK and **L. Amaducci,** Italy
Reporter: **A.N. Davison**

09.50 BIOCHEMICAL DEVELOPMENT OF NERVOUS TISSUE IN CULTURE
Rehovot, Israel, August 28—31, 1979
Organizers: **E. Giacobini,** USA, **A. Shahar,** Israel and **A. Vernadakis,** USA
Reporter: **E. Giacobini**

10.15 Coffee Break

10.45 ENZYMES AND NEUROTRANSMITTERS IN MENTAL DISEASE
Haifa, Israel, August 28—31, 1979
Organizers: **M.B.H. Youdim,** Israel, **E. Usdin,** USA and **T. Sourkes,** Canada
Reporter: **T. Sourkes**

11.05 NEUROCHEMISTRY OF THE RETINA
Athens, Greece, August 28 — September 1, 1979
Organizers: **N.G. Bazan,** Argentina and **S.G.A. Alivisatos,** Greece
Reporter: **N.G. Bazan**

11.25 REGULATION OF ENDORPHINS AND OTHER NEUROPEPTIDE TRANSMITTERS
Brescia, Italy, August 29 — September 1, 1979
Organizers: **M. Trabucchi,** Italy, **S. Govoni,** Italy, **P.F. Spano,** Italy and **A. Tito,** Italy
Reporter: **M. Trabucchi**

11.45 GENETIC APPROACHES TO THE NERVOUS SYSTEM AND NEUROLOGICAL DISORDERS
Greece, August 30—31, 1979
Organizers: **J. Blass,** USA, **G.S. Omenn,** USA, **A.P. Simopoulos,** USA, **E. Kouvelas,** Greece, **F. Kafatos,** Greece, and **S. Doxiadis,** Greece
Reporter: **J. Blass**

MONDAY, SEPTEMBER 3, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P1

BIOCHEMISTRY OF NEUROTRANSMITTERS AND RECEPTORS

Please see the General Information section regarding the display of posters

Poster No

1 INHIBITION OF THE UPTAKE OF 5HT, DA, GABA, AND TAURINE BY ANTIEPILEPTIC DRUGS IN HUMAN BLOOD PLATELETS
M.M. Airaksinen, P.R. Ahokas and **E.M. Airaksinen,** Dept. of Pharmacology, University of Kuopio, Finland

2 LIMITED DIGESTION WITH PEPSIN AS A TOOL FOR STUDYING THE MOLECULAR STRUCTURE OF ELONGATED FORMS OF ELECTRIC EEL ACETYLCHOLINESTERASE
L. Anglister, S.J. Leibovich and **I. Silman,** Neurobiology Dept., The Weizmann Institute of Science, Rehovot, Israel

3 EFFECT OF REPEATED ELECTROCONVULSIVE SHOCK (ECS) ON RAT STRIATAL (^{3}H)SPIROPERIDOL BINDING AND CHOLINERGIC PARAMETERS
C.K. Atterwill and **A.K. Prince,** MRC Unit of Clinical Pharmacology, Radcliffe Infirmary, Oxford, UK

4 SOMATODENDRITIC MECHANISMS, GABAERGIC NEURONES AND THE RAT MESOLIMBIC DOPAMINERGIC PATHWAY
P.M. Beart and **A.L. Gundlach,** University of Melbourne, Clinical Pharmacology and Therapeutics Unit, Austin Hospital, Heidelberg, Vic., Australia

5 EFFECTS OF VISUAL DEPRIVATION ON THE SUBSTANCE P AND METENKEPHALIN CONTENTS OF VARIOUS BRAIN STRUCTURES
Y. Ben-Ari*, P. Pradelles, J. Humbert, C. Gros and **F. Dray,**
*LPN 1, CNRS, Gif-sur-Yvette and URIA, Institut Pasteur, Paris, France

6 DOPAMINE MIMETICS INCREASE STRIATAL CYCLIC AMP CONTENT IN UNSTRESSED BUT NOT IN STRESSED RATS
G. Biggio, M.G. Corda and **G.L. Gessa,** Institute of Pharmacology, University of Cagliari, Italy

7 QUATERNARY STRUCTURE OF ACETYLCHOLINESTERASE MOLECULAR FORMS IN HIGHER VERTEBRATES
S. Bon, M. Vigny and **J. Massoulié,** Lab. de Neurobiologie, Ecole Normale Supérieure, Paris, France

8 ROLE OF α- AND β-ADRENORECEPTOR ACTIVATION IN ACUTE CARDIOTOXIC PHENOMENA CAUSED BY CATECHOLAMINES
A. Brown, M. Green, R. Blaiklock, G. Guideri and **D. Lehr,**
Dept. of Pharmacology, New York Medical College, Valhalla, USA

MONDAY, SEPTEMBER 3, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P1 (Continued)

Poster No.

9 STEREOCHEMICAL CHARACTERISTICS OF DOPAMINE AGONISTS: MOLECULAR STRUCTURE OF BROMOCRIPTINE AND COMPARISONS WITH APOMORPHINE
N. Camerman and **L. Chan,** Dept. of Biochemistry, University of Toronto, Canada and **A. Camerman,** Depts. of Neurology and Pharmacology, University of Washington, Seattle, USA

11 CEREBELLAR CORTEX INFLUENCE ON THE PROSENCEPHALIC CONTENT OF MONOAMINES
J. Cano, J. Garcia-Uria, A. Machado and **F. Reinoso-Suarez,** Depto. de Morfologia, Facultad de Medicina, Universidad Autónoma de Madrid, Spain

12 EFFECT OF MUSCIMOL ON CATECHOLAMINE METABOLISM IN THE HYPOTHALMUS
D.D. Clarke and **K.H. Siegel,** Chemistry Dept., Fordham University, NY and **W.J. Nicklas** and **S. Berl,** Mt. Sinai School of Medicine, NY, USA

13 THE INTERELATION OF THE ADRENERGIC AND CHOLINERGIC SYSTEMS IN THE RETINA AND THE S-POTENTIAL BEHAVIOR
B.D. Drujan, K. Negishi and **M. Laufer,** Instituto Venezolano de Investigaciones Científicas, Caracas, Venezuela and University of Kanazawa, Japan

14 BIOCHEMICAL STUDIES WITH HRP-197, A NEW ANTIDEPRESSANT AGENT
D.B. Ellis, C.R. Mantione, S.K. Puri and **L.R. Meyerson,** Dept. of Biochemistry, Hoechst-Roussel Pharmaceuticals, Inc., Somerville, NJ, USA

15 MODIFICATION OF TYRAMINE RESPONSES BY PROPARGYL INHIBITORS OF MAO-B
J.P.M. Finberg, A. Sabbagh and **M.B.H. Youdim,** School of Medicine, The Technion, Haifa, Israel

16 THE TRANSIENT EFFECT OF POTASSIUM DEPOLARIZATION ON CALCIUM UPTAKE AND ACETYLCHOLINE RELEASE IN PURE CHOLINERGIC SYNAPTOSOMES
C. Fiol, X. Quintana, J. Marsal, J. Esquerda, C. Durana, and**L. Vergara,** Lab. Histologia, Fac. Medicina, University of Barcelona and Dept. Anatomía Patológica y Servicio Bioquímica C.S. "Principes de España", Barcelona, Spain

17 A POSSIBLE ROLE OF GLUTAMATE DECARBOXYLASE IN INFORMATION PROCESSING
A. Fleissner, Neurochemistry Abt. d. Psychiatrischen Universitätsklinik, Hamburg, West Germany

POSTER PRESENTATIONS P1 (Continued)

Poster No.

18 INHIBITION BY Ca^{2+} OF THE VERATRIDINE-INDUCED RELEASE OF TRANSMITTER AMINO ACIDS FROM SUPER-FUSED RAT BRAIN SYNAPTOSOMES
V. Gallo, G. Levi and **M. Raiteri***, Laboratory of Cell Biology, Rome and * Institute of Pharmacology, Catholic University, Rome, Italy

19 THE EFFECT OF INSULIN-INDUCED HYPOGLYCEMIA ON MONOAMINE METABOLISM IN RAT BRAIN AND DISSECTED BRAIN REGIONS
J. Garcia de Yebenes, V. Martinez Arrieta, L. Calandre and **M.A. Mena,** Centro Ramon y Cajal, Servicio de Neurologia y Departamento de Investigacion, Madrid, Spain

20 ADMINISTRATION OF SUBACUTE DOSES OF ORGANOPHOSPHATES CAUSES A DECREASE IN THE LEVEL OF MUSCARINIC BINDING-SITES IN RAT BRAIN
H. Gazit, I. Silman and **Y. Dudai,** Dept. of Neurobiology, The Weizmann Institute of Science, Rehovot, Israel

21 USE OF PEROXIDASE COUPLED DOPAMINE β-HYDROXYLASE (DBH) ANTIBODIES TO STUDY VESICLE DYNAMICS IN NORADRENERGIC NERVES
L.B. Geffen, R.A. Rush and **T.J. Millar,** Centre for Neuroscience, Human Physiology Dept., Finders University of South Australia, Bedford Park, Australia

22 SEROTONIN (5-HT) RELEASE FROM STIMULATED PERIPHERAL NEURONS
M.D. Gershon and **H. Tamir,** Depts. of Anatomy and Psychiatry, Columbia University, College of Physicians and Surgeons, NY, USA

23 DIFFERENTIAL UPTAKE OF DOPAMINE IN STRIATAL AND MESOCORTICAL SYNAPTOSOMES FOLLOWING ACUTE FIGHTING IN ISOLATED MICE
M.G. Hadfield, Medical College of Virginia, Virginia Commonwealth University, Richmond, U.S.A.

24 AMMONIUM ION INHIBITION OF EVOKED GLUTAMATE RELEASE IN HIPPOCAMPUS IN VITRO
A. Hamberger, B. Hedquist, H. Lundborg and **B. Nystrom,** Institute of Neurobiology, University of Goteborg, Sweden

25 CYSTEINE SULPHINIC ACID DECARBOXYLASE AND GLUTAMIC ACID DECARBOXYLASE FROM CALF BRAIN
A.A. Heinämäki and **R.S. Piha,** Dept. of Biochemistry, University of Oulu, Finland

26 TETANUS TOXIN INCREASES SEROTONIN LEVELS IN MOUSE BRAIN
J.L. Heredero, J. Aguilera and **F. Gonzalez Sastre,** Dept. Bioquimica, F. Medicina, Universidad Autónoma de Barcelona, Cerdanyola, Spain

MONDAY, SEPTEMBER 3, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P1 (Continued)

Poster No.

27 5-HYDROXYTRYPTAMINE BINDING CAPACITY OF THE RECONSTITUTED SYSTEM WITH MYELIN BASIC PROTEINS AND LIPIDS
R. Ishitani, A. Miyakawa, K. Mizusaki and **T. Iwamoto,** Dept. of Pharmacology, Faculty of Pharmaceutical Sciences, Josai University, Saitama, Japan

28 CENTRAL INTERACTIONS OF KYNURENINE WITH SEROTONIN: DIRECT OR INDIRECT?
M.H. Joseph, Div. of Psychiatry, Clinical Research Centre, Harrow, Middlesex, UK

29 DEPLETION OF BIOGENIC AMINES FROM BRAIN, HEART AND KIDNEY BY A UNIQUE INHIBITOR OF AROMATIC AMINO ACID DECARBOXYLASE
M.J. Jung, M.G. Palfreyman, J. Wagner, B. Rieger and **M. Zraika,** Centre de Recherche Merrell International, Strasbourg Cedex, France

31 EVIDENCE FOR GABA-ASSOCIATED AND GABA-INDEPENDENT BENZODIAZEPINE RECEPTORS
C.A. Klepner, R.F. Squires, D.I. Benson and **B. Beer,** Lederle Labs., Pearl River, NY, USA

32 EFFECTS OF GLORGYLINE AND L-DEPRENYL ON THE UPTAKE OF DOPAMINE, NORADRENALINE AND SEROTONIN BY RAT BRAIN SYNAPTOSOMES
J.C.K. Lai, L. Lim and **A.N. Davison,** Dept. of Neurochemistry, Institute of Neurology, London, UK

33 A COVALENTLY BOUND PHOTOISOMERIZABLE AGONIST AT ELECTROPHORUS ELECTROPLAQUES: COMPARISON WITH REVERSIBLE AGONISTS
H.A. Lester*, M.E. Krouse*, M.M. Nass*, N.H. Wasserman and **B.F. Erlanger,** *Div. of Biology, California Institute of Technology, Pasadena and Dept. of Microbiology, Columbia University, NY, USA

34 RELEASE AND EXCHANGE OF EXOGENOUS, EXOGENOUS AND NEWLY SYNTHESIZED GABA AND GLUTAMATE IN RAT BRAIN SYNAPTOSOMES
G. Levi*, M. Banay-Schwartz** and **M. Raiteri,** *Lab. of Cell Biology, Rome, Italy, **Institute of Neurochemistry, Ward's Island, NY, USA and Institute of Pharmacology, Catholic University, Rome, Italy

35 THE SUPERIOR CERVICAL GANGLION OF THE RAT AS A MODEL SYSTEM IN EXPLORING THE ROLE OF CYCLIC NUCLEOTIDES IN THE NERVOUS SYSTEM
T. Lindl, Fachbereich Biologie, University of Konstanz, West Germany

36 STRUCTURE-ACTIVITY RELATIONSHIPS ON 5-HT AGONISTS AND ANTAGONISTS
S Maayani, H. Weinstein and **J.P. Green,** Mount Sinai School of Medicine, NY, USA

POSTER PRESENTATIONS P1 (Continued)

Poster No.

37 CALCIUM DEPENDENT RELEASE OF (^{3}H)-D-ASP FROM DORSOLATERAL SEPTUM AND CA1 STRATUM RADIATUM AFTER SELECTIVE ELECTRICAL STIMULATION OF TWO AXON COLLATERALS OF CA3 PYRAMIDAL CELLS IN HIPPOCAMPUS
D. Malthe-Sørenssen and **K.K. Skrede,** Norwegian Defence Research Establishment, Div. for Toxicology, Kjeller, Norway

38 BIOGENIC AMINE ACCUMULATION IN STORAGE VESICLES
R. Maron, S. Schuldiner, H. Fishkes and **B.I. Kanner,** Dept. of Molecular Biology and Medical Biochemistry, Hebrew University-Hadassah Medical School, Jerusalem, Israel

39 PEPTIDES AND GLUTAMATE AS TRANSMITTORS OF THE SENSORY ROOT AFFERENTS
S.-O. Molin and **A. Hamberger,** Institute of Neurobiology, University of Göteborg, Sweden

40 ULTRASTRUCTURAL CHANGES INDUCED BY DEPOLARIZATION OF TORPEDO ELECTRIC ORGAN SYNAPTOSOMES
N. Morel, R. Manaranche, T. Gulik-Krzywicki and **M. Israël,** Laboratoire de Neurobiologie Cellulaire, Centre National de la Recherche Scientifique, Gif sur Yvette, France

41 RAPHE NEURONS INNERVATE CEREBRAL MICROVESSELS WITHIN RAT FOREBRAIN
M.A. Moskowitz, J.F. Reinhard and **J.E. Liebmann,** Dept. of Nutrition and Food Science, M.I.T., Cambridge, MA, USA

42 EFFECT OF LITHIUM ON CIRCADIAN CYCLIC AMP RHYTHMS IN DISCRETE AMINERGIC STRUCTURES IN THE RAT BRAIN
J.P. Natali, P. Joanny, Y. Millet, G. Chouvet* and **P. Carayon****,
Lab. Physiologie, Faculté Médecine, Marseille, *Lab. Médecine Expérimentale, Univ. Cl. Bernard, Lyon and **Lab. Biochemie Médicale, Faculté Médecine, Marseille, France

30 A NEW METHOD FOR MEASURING CATECHOLAMINE TURNOVER USING A VERY POTENT INHIBITOR OF AROMATIC AMINO ACID DECARBOXYLASE (AADC), DL-α-MONOFLUOROMETHYLDOPA
M.G. Palfreyman, M.J. Jung, J. Wagner and **M. Zraika,** Centre de Recherche Merrell International, Strasbourg Cedex, France

43 THE EFFECT OF COLCHICINE AND CYTOCHALASIN B ON THE RELEASE OF TAURINE FROM THE CHICK RETINA
H. Pasantes-Morales, R. Salceda and **A.M. López-Colomé,** Centro de Investigaciones en Fisiología Celular, Universidad de México, México

44 ROLE OF SEROTONIN IN BLOOD PRESSURE REGULATION
A.J. Ramirez, E. Chemerinski and **M.A. Enero,** Instituto de Investigaciones Farmacológicas (CONICET), Buenos Aires, Argentina

POSTER PRESENTATIONS P1 (Continued)

Poster No.

45 CYCLIC AMP IS UNLIKELY TO MEDIATE THE DEPRESSIVE EFFECT OF ADENOSINE ON HIPPOCAMPAL EVOKED POTENTIALS
M. Reddington and **P. Schubert,** Max-Planck-Institut für Psychiatrie, Münich, West Germany

46 TRANSPORT OF BIOGENIC AMINES IN NORMAL AND TRANSFORMED GLIA
T. Ritchie, S. Glusman, R.L. Suddith and **B. Haber,** Marine Biomedical Institute, Dept. H.B.C. & Genetics, Dept. of Neurology, University of Texas Medical Branch, Galveston, USA

47 DIFFERENTIAL STIMULATION OF ADENYLATE CYCLASE IN MAMMALIAN BRAIN REGIONS BY ADTN AND LISURIDE
M.R. Rosenfeld and **M.H. Makman,** Albert Einstein College of Medicine, Bronx, NY, USA

48 GENETIC DETERMINATION OF SERUM DOPAMINE-β-HYDROXYLASE (DBH) ACTIVITY IN RATS
J.M. Stolk, Neuroscience Program, Maryland Psychiatric Research Center, University of Maryland School of Medicine, Baltimore, USA

49 TRANSPORT OF GLUTAMINE IN BRAIN CORTEX SLICES, NEURONAL PERIKARYA AND GRANULE CELLS AND ASTROCYTES CULTURED FROM MOUSE BRAIN
G. Svenneby*, A. Schousboe, E. Kvamme*, A. Yu** and **L. Hertz,**
*Neurochemical Laboratory, The Oslo University Psychiatric Clinic, Norway,
**Dept. of Biochemistry, University of Copenhagen, Denmark and Dept. of Anatomy, University of Saskatchewan, Canada

50 NEUROTRANSMITTERS IN AN ISOLATED COLUMN OF CAT CAUDATE NUCLEUS
K. Taniyama, C. Nitsch, A. Wagner and **R. Hassler,** Dept. of Neurobiology, Max-Planck-Institut für Hirnforschung, Frankfurt am Main, West Germany

51 PROPERTIES OF THE CALCIUM--DEPENDENT BINDING OF BRAIN GLUTAMATE DECARBOXYLASE TO PHOSPHATIDYLCHOLINE-PHOSPHATIDYLSERINE VESICLES
R. Tapia and **M. Covarrubias,** Dpto. de Neurociencias, Centro de Investigaciones en Fisiología Celular, Universidad Nacional Autónoma de México, México

52 NEUROTRANSMITTER AMINO ACID TRANSPORT IN VARIOUS CEREBRAL REGIONS OF THE CAT WITH PENICILLIN EPILEPSY
F. Tezzon, M. Varotto, A. Pellegrini, G.F. Testa and **L. Battistin,** Dept. of Neurology, University of Padova Medical School, Italy

53 AGGRESSIVE COMPONENT OF THE ISOLATION SYNDROME IN MICE AND CATCHOLAMINE VARIATIONS IN DISCRETE BRAIN AREAS
Y. Tizabi, V.J. Massari and **D.M. Jacobowitz,** Dept. of Pharmacology, Howard University, Washington, DC and Lab. of Clinical Science, NIMH, Bethesda, MD, USA

POSTER PRESENTATIONS P1 (Continued)

Poster No.

54 EXISTENCE OF DOPAMINE-SENSITIVE ADENYLATE CYCLASE AND Na, K-ATPase IN CEREBELLAR TISSUE
Y. Tsukada, K. Akagawa and **K. Mikoshiba,** Dept. of Physiology, Keio University School of Medicine, Shinanomachi, Tokyo, Japan

55 INFLUENCE OF SOME NEUROLOGICAL DRUGS ON THE ELECTRICAL ACTIVITY IN THE STATIC NERVE OF THE PROSOBRANCH GASTROPOD LITTORINA LITTOREA
H.-U. Tüllner, Dr. Madaus & Co., Research and Development, Köln, West Germany

56 SPECIFIC ACTIVITIES OF RETAINED AND RELEASED NOREPINEPHRINE IN AN ISOLATED VASCULAR PREPARATION WITH PRELABELED TRANSMITTER STORES
G.M. Tyce, D.K. Rorie and **S.M. Muldoon,** Mayo Clinic and Mayo Foundation, Rochester, MN and U.S.U.H.S., Bethesda, MD, USA

57 DOPAMINE AGONISTIC EFFECTS OF N'-CINNAMYL- AND N'-PROPYLPHENYL DERIVATIVES OF N-(BENZHYDRYLOXYETHYL) PIPERAZINE
P van der Zee and **W. Hespe,** Gist-Brocades N.V., Research & Development, Haarlem, The Netherlands

58 DIFFERENCES BETWEEN THE DOPAMINE (DA)- AND NORADRENALINE (NA) INDUCED SYNTHESIS OF CYCLIC ADENOSINE MONOPHOSPHATE (cAMP) IN THE INCUBATED RAT RETINA
J.S. Wassenaar, H. Roelse and **J. Korf,** Dept. of Neurophysiology, University of Groningen, The Netherlands

59 THE EFFECT OF LEVODOPA ON HALOPERIDOL-INDUCED SUPERSENSITIVITY
W.J. Weiner, P.C. Carvey, A. Hitri, P.A. Nausieda and **H.L. Klawans,** Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, USA

60 ULTRASTRUCTURAL ANALYSIS OF IMMATURE RAT CORTEX AFTER SYSTEMIC TREATMENT WITH DIFFERENT DOSES OF 6-HYDROXYDOPAMINE/6-OHDA/
N.R. Zecevic, Institute for Biological Research, Belgrade, Yugoslavia

61 ADENOSINE-CYCLE IN CHOLINERGIC NERVE ENDINGS
H. Zimmermann, M.J. Dowdall* and **D.A. Lane,** Max-Planck-Institut für Biophysikalische Chemie, Abt. Neurochemie, Göttingen, West Germany and *Dept. of Biochemistry, University Hospital & Medical School, Nottingham, UK

62 VESICULAR ACETYLCHOLINE AND ATP RECYLE INDEPENDENTLY
H. Zimmermann, Max-Planck-Institut für Biophysikalische Chemie, Abt. Neurochemie, Göttingen, West Germany

MONDAY, SEPTEMBER 3, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P2

METABOLISM OF THE NERVOUS SYSTEM

Please see the General Information section regarding the display of posters

Poster No.

63 THE ACTIONS OF GABA TRANSAMINASE INHIBITORS ON THE RELEASE OF GABA IN VIVO AND IN VITRO: EFFECTS OF SENSORY STIMULATION
A.S. Abdul-Ghani, P.J. Norris, J. Coutinho-Netto and **H.F. Bradford,** Dept. of Biochemistry, Imperial College, London, UK

64 CHARACTERIZATION OF THE PROTON-TRANSLOCATING ATPase OF BOVINE CHROMAFFIN GRANULE MEMBRANES
D.K. Apps and **J.G. Pryde,** Dept. of Biochemistry, University of Edinburgh Medical School, Scotland, UK

65 POLYADENOSINE DIPHOSPHATE RIBOSE POLYMERASE ACTIVITY IN NEURONAL AND GLIAL CELL NUCLEI FROM BEEF CEREBRUM
J. Bilen, M.E. Ittel, C. Niedergang, H. Okazaki and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

66 MEASUREMENTS OF BLOOD-BRAIN TRANSFER CONSTANTS FOR THREE NON-METABOLIZED AMINO ACIDS
R.G. Blasberg, C.S. Patlak and **J.D. Fenstermacher,** NIH, Bethesda, MD, USA

67 LECITHIN AND CHOLINE SYNTHESIS FROM PHOSPHATIDYLETHANOLAMINES IN BRAIN
J.K. Blusztajn and **R.J. Wurtman,** Massachusetts Institute of Technology, Cambridge, USA

68 GLUTAMINE UPTAKE BY GLIAL AND NEURONAL CULTURES
J. Borg, N. Ramaharobandro, J. Mark and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

69 EVIDENCE FOR A PREDOMINANTLY B FORM OF MAO IN RAT LIVER MICROSOMES
J. Castro, M. Unzeta and **F. Gonzalez Sastre,** Dept. Bioquimica, Facultad de Medicina, Universidad Autónoma de Barcelona, Cerdanyola, Spain

70 PURIFICATION AND PROPERTIES OF 2'3' — CNPase
P. Clapshaw, H.W. Müller and **W. Seifert,** Max-Planck-Institut, F. Miescher-Lab., Tübingen, West Germany

POSTER PRESENTATIONS P2 (Continued)

Poster No.

71 THE LEVEL OF CARBONIC ANHYDRASE IN RAT GLIAL PRIMARY CULTURE TREATED WITH BRAIN EXTRACTS AND LOCALIZATION OF THIS ENZYME IN OLIGODENDROGLIA-LIKE CELLS
J.P. Delaunoy, M. Bansart, M. Sensenbrenner, P. Mandel and **G. Devilliers,** *Service de Microscopie Electronique*, Centre de Neurochimie du CNRS, Strasbourg Cedex, France

72 INHIBITION OF CALCIUM-DEPENDENT BRAIN PHOSPHATIDYLINOSITOL PHOSPHODIESTERASE BY CYCLITOLS AND METAL IONS
J. Eichberg and **W.J. Zetusky,** Dept. of Biophysical Sciences, University of Houston, TX, USA

73 METABOLIC ALTERATIONS IN THE HYPOTHALAMUS AND CEREBRAL CORTEX OF MALE RATS DURING ACUTE AND CHRONIC STARVATION, AS WELL AS AFTER REFEEDING
L.F. Fanjul and **C.M. Ruiz de Galarreta,** Depto. Fisiología y Bioquímica, Colegio Universitario de Medicina, Las Palmas, Spain

74 IN VITRO STUDIES OF SYNAPTOSOMAL TRANSPORT PROCESSES FOR GABA: EFFECTS OF SOME GABA-TRANSAMINASE INHIBITORS
C.R. Gardner and **M.H. Richards,** Centre de Recherche Merrell International, Strasbourg Cedex, France

75 THE SEROTONIN SENSITIVE ARYL ACYLAMIDASE AND ITS ASSOCIATION WITH ACETYLCHOLINESTERASE
S.T. George, A. Oommen and **A.S. Balasubramanian,** Neurochemistry Lab., Dept. of Neurological Sciences, Christian Medical College Hospital, Vellore, India

76 β-OXIDATION OF [1-^{14}C]PALMITIC AND [1-^{14}C]LIGNOCERIC ACID BY RAT BRAIN AND LIVER
N. Kawamura and **Y. Kishimoto,** J.F. Kennedy Institute, Baltimore, MD and Johns Hopkins School of Medicine, Baltimore, MD, USA

77 THE SEPARATION OF EXTRA- AND INTRACELLULAR AChE ACTIVITY OF RAT SYMPATHETIC GANGLION BY MILD PROTEOLYTIC TREATMENT
B. Klinar and **M. Brzin,** Institute of Pathophysiology, School of Medicine, Ljubljana, Yugoslavia

78 EFFECT OF ETHANOL ON MEMBRANE-BOUND ENZYMES IN RAT BRAIN
S. Lieberthal, M. Oldfield and **B.C. Shanley,** Dept. of Medical Biochemistry, School of Pathology, University of the Witwatersrand and South African Institute for Medical Research, Johannesburg, South Africa

79 SOME DYNAMIC ASPECTS OF NORADRENALINE METABOLISM IN MAN
G. Mårdh, B. Sjöquist and **E. Anggård,** Dept. of Alcohol and Drug Addiction Research, Karolinska Institute, Stockholm, Sweden

POSTER PRESENTATIONS P2 (Continued)

Poster No.

80 ALTERATIONS IN CYCLIC NUCLEOTIDE METABOLISM AFTER DENERVATION OF SKELETAL MUSCLES
J.A. McLane and **I.R. Held,** Hines Veterans Administration Hospital and Loyola University Medical Center, Maywood, IL, USA

81 DOES GLUTAMINE, INJECTED DIRECTLY INTO THE BRAIN, MIX WITH THE ENDOGENOUS GLUTAMINE POOL?
W.C. Nijenmanting and **C.J. van den Berg,** Studygroup Inborn Errors and Brain, Dept. of Psychiatry, University of Groningen, The Netherlands

83 TOPOGRAPHICAL DISTRIBUTION OF PURINE NUCLEOSIDE PHOSPHORYLASE IN THE HUMAN NEURAXIS
I.F. Norstrand and **M.D. Glantz,** Brooklyn VA Medical Center and Chemistry Dept., Brooklyn College, NY, USA

84 SUBCELLULAR DISTRIBUTION OF THREE N-ACETYL-β-D-HEXOSAMINIDASE ISOENZYMES IN BRAIN TISSUE
T. Pampols, M. Girós, J. Sabater and **F. Gonzalez-Sastre,** Inst. Prov. Bioquímica, Cedanyola, Barcelona, Spain

85 A MULTIFOCAL APPROACH TO THE TROPHIC EFFECT
F. Piccoli, R. Guarneri, P. Guarneri, C. Mocciaro and **G. Savettieri,** Dept. of Neurology, University of Palermo, Italy

86 PURIFICATION OF CYTOSOLIC CYSTEINE SULFINIC ACID TRANSAMINASE
M. Recasens, P. Basset and **P. Mandel,** Centre de Neurochimie, INSERM, Strasbourg Cedex, France

87 TRANSAMINASES INVOLVED IN CYSTEINE AND GLUTAMATE METABOLISMS, A COMPARATIVE STUDY
M. Recasens and **P. Mandel,** Centre de Neurochimie, INSERM, Strasbourg Cedex, France

88 CHARACTERIZATION OF A CHOLESTEROL ESTER HYDROLASE FROM HUMAN CEREBROSPINAL FLUID
H. Reiber and **W. Voss,** Neurochemisches Labor der Neurologischen Klinik der Universität, Göttingen, West Germany

89 THE CELLULAR LOCALIZATION AND BIOSYNTHESIS OF THE HIGH MOLECULAR WEIGHT FORMS OF ACETYLCHOLINESTERASE IN VIVO AND IN VITRO
F. Rieger and **J. Koenig,** Biologie et Pathologie Neuromusculaires, INSERM, Paris, France

POSTER PRESENTATIONS P2 (Continued)

Poster No.

10 THE INHIBITION OF ADP PHOSPHORYLATION FOLLOWING CA^{++} ACCUMULATION IN BRAIN MITOCHONDRIA
I. Roman, A. Clark and **P.D. Swanson,** University of Washington, Div. of Neurology, Seattle, USA

90 CTP-MEDIATED DOLICHYL MONOPHOSPHATE SYNTHESIS IN CENTRAL NERVOUS TISSUE
M.G. Scher, W.A. Burton and **C.J. Waechter,** Dept. of Biological Chemistry, University of Maryland School of Medicine, Baltimore, USA

91 REGULATION OF ADENYLATE CYCLASE IN A NEUROBLASTOMA X GLIOMA (N X G) HYBRID CELL LINE
S.K. Sharma and **M. Nirenberg,** Dept. of Biochemistry, AIIMS, New Delhi, India and Lab. of Biochemical Genetics, NIH, Bethesda, MD, USA

92 SYNERGISTIC AND ANTAGONISTIC EFFECTS OF Na^{+} AND K^{+} ON ELECTROPLAX (Na,K)-ATPASE PHOSPHOENZYME LEVELS IN THE PRESENCE OF Pb^{++}
G.J. Siegel, Neurology Dept., University of Michigan Medical Center, Ann Arbor, USA

93 INFLUENCE OF METHYLXANTHINES ON SULFATIDE SYNTHESIS IN MOUSE BRAIN DURING MYELINATION
H.P. Siegrist, T. Burkart, U. Wiesmann and **N. Herschkowitz,** Dept. of Pediatrics, University of Berne, Switzerland

94 METABOLIC AND PHARMACODYNAMIC INTERACTIONS BETWEEN CATECHOLAMINES AND ALCOHOL IN ALCOHOL DEPENDENT PATIENTS
B. Sjöquist, S. Borg, E. Magnuson and **H. Kvande,** Dept. of Alcohol and Drug Addiction Research and Clinic of Alcoholic Diseases, Karolinska Institute, Stockholm, Sweden

95 INHIBITION IN RISE OF ACETALDEHYDE BLOOD LEVELS BY L-ASCORBIC ACID ALONE OR IN COMBINATION WITH L-CYSTEINE AND THIAMINE HCl
H. Sprince, C.M. Parker and **G.G. Smith,** VA Medical Center, Coatesville, PA and Depts. of Psychiatry and Pharmacology, Jefferson Medical College, Philadelphia, PA, USA

96 TRANSPORT OF 2-DEOXY-[^{3}H]-D-GLUCOSE IN MICROVESSELS ISOLATED FROM BOVINE CEREBRAL CORTEX
V. Stefanovich, Hoechst Aktiengesellschaft, Frankfurt am Main, Wiesbaden, West Germany

97 HETEROGENOUS PHOSPHORYLATION ACTIVITY IN NEUROSECRETOSOMAL MEMBRANES FROM OX NEUROHYPOPHYSIS
M. Treiman, S. Worm-Petersen and **N.A. Thorn,** Institute of Medical Physiology C, University of Copenhagen, Denmark

POSTER PRESENTATIONS P2 (Continued)

Poster No.

82 ON THE SOURCES OF GLUTAMATE FOR GABA SYNTHESIS
C.J. van den Berg, W.C. Nijenmanting and **R. Bruntink,** Studygroup Inborn Errors and Brain, Dept. of Psychiatry, University of Groningen, The Netherlands

98 EFFECT OF SHORT-CHAIN AND BRANCHED-CHAIN FATTY-ACIDS ON SUCCINIC SEMI-ALDEHYDE DEHYDROGENASE
J.W. van der Laan, A.W.C.M. Jacobs and **J. Bruinvels,** Dept. of Pharmacology, Faculty of Medicine, Erasmus University, Rotterdam, The Netherlands

99 MATURATION OF ACETYLCHOLINESTERASE (AChE) MOLECULAR FORMS IN NEUROBLASTOMA CELLS
M. Vigny, M. Lazar and **L. Greene,** Laboratoire de Neurobiologie, Ecole Normale Supérieure, Paris, France

100 MORPHOLOGICAL AND BIOCHEMICAL ALTERATIONS IN CULTURED NEUROBLASTOMA (C1300) AND GLIOMA (138MG) CELLS EXPOSED TO HEXACHLOROPHENE
E. Walum, National Defence Research Institute, Dept. 4, Sundbyberg, Sweden

101 FURTHER CHARACTERIZATION OF NUCLEOTIDE UPTAKE BY CHROMAFFIN GRANULES
A. Weber, S.W. Carmichael, E. Huber and **H. Winkler,** Dept. of Pharmacology, University of Innsbruck, Austria

102 THE METABOLISM OF POLYADENYLATED RIBONUCLEIC ACID FROM BRAIN POLYSOMES OF MOUSE OF THE CONVULSIVE E1 STRAIN
S. Yamagami, K. Mori, H. Onishi, M. Tsuji, K. Ohno and **Y. Kawakita,** Dept. of Neuropsychiatry, Osaka City University Medical School, Japan

103 QUANTITATION AND SIGNIFICANCE OF INDOLEACETIC AND INDOLEPROPIONIC ACIDS IN RAT AND HUMAN CEREBROSPINAL FLUID
S.N. Young, S. Gauthier, G.M. Anderson and **W.C. Purdy,** Depts. of Psychiatry, of Neurology and Neurosurgery and of Chemistry, McGill University, Montreal, Canada

104 GABA AND GLYCINE UPTAKE IN VITRO IN HUMAN CEREBRAL TISSUE
G. Zanchin, F. Maggioni, M. Saladini, A. Carteri and **L. Battistin,** Depts. of Neurology, Neurosurgery and Psychiatry, Padova University Medical School, Italy

105 PURIFICATION AND REGULATION OF RAT BRAIN SOLUBLE GUANYLATE CYCLASE
J. Zwiller, P. Basset and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

MONDAY, SEPTEMBER 3, 1979

15.00—17.30 **Hall B**

SYMPOSIUM/WORKSHOP — SW1

COMPARATIVE NEUROCHEMISTRY OF ADRENERGIC AND CHOLINERGIC VESICLES

Chairmen: **H. Winkler,** Austria
S.J. Morris, West Germany

15.00 COMPOSITION AND MOLECULAR ORGANISATION OF ADRENERGIC VESICLES
H. Winkler, E. Huber, R. Fischer-Colbrie and **A. Weber,**
Dept. of Pharmacology, University of Innsbruck, Austria

15.20 STOICHIOMETRY AND STRUCTURE OF TORPEDO SYNAPTIC VESICLES
S.J. Morris, A.L. Cahill, P. Giompres, H. Stadler, T. Tashiro, J. Walker and **V.P. Whittaker,** Abt. Neurochemie, Max-Planck-Institut für Biophysikalische Chemie, Göttingen, West Germany

15.45 CHEMICAL AND PHYSICAL CHARACTERIZATION OF SYNAPTIC VESICLES
R.B. Kelly, J.A. Wagner, S.S. Carlson and **J.W. Deutsch,** Dept. of Biochemistry and Biophysics, University of California, San Francisco, USA

16.05 N.M.R. STUDIES OF CHROMAFFIN GRANULE STRUCTURE
R.R. Sharp and **R. Sen,** The University of Michigan, Ann Arbor, USA

16.25 CATECHOLAMINE UPTAKE AND STORAGE IN ADRENERGIC VESICLES
G.K. Radda, Dept. of Biochemistry, University of Oxford, UK

16.50 THE EFFECT OF IONIC GRADIENTS ON ACETYLCHOLINE RELEASE FROM TORPEDO SYNAPTIC VESICLES
D.M. Michaelson* and **G. Rudnick+,** *Dept. of Biochemistry, Tel Aviv University, Ramat Aviv, Israel and +Dept. of Pharmacology, Yale University, School of Medicine, New Haven, CT, USA

17.05 ADENYLATE CYCLASE IN CHROMAFFIN GRANULES AND STRUCTURAL ANALYSIS OF INTRAGRANULAR ATP BY ^{31}P-NMR
H.B. Pollard, J.S. Cohen and **O. Zinder,** National Institutes of Health, Bethesda, MD, USA and Technion Medical School, Haifa, Israel

17.20 GENERAL DISCUSSION

MONDAY, SEPTEMBER 3, 1979

15.00—17.30 **Hall A**

SYMPOSIUM/WORKSHOP — SW2

DEVELOPMENT OF METHODOLOGIES FOR STUDYING BRAIN METABOLISM

In honor of J.H. Quastel

Chairmen: **J. Magnes,** Israel
C. Fieschi, Italy

15.00 IN VITRO CONTRIBUTIONS TO THE STUDY OF BRAIN METABOLISM
H. McIlwain, Dept. of Biochemistry, Institute of Psychiatry, London University, UK

15.15 IN VIVO STUDIES OF CMR IN ANIMALS USING FLUOROMETRY TECHNIQUES
A. Mayevsky, Dept. of Life Sciences, Bar Ilan University, Ramat Gan, Israel

15.30 USE OF THE ISOLATED CANINE BRAIN FOR STUDIES OF BRAIN METABOLISM AND TRANSPORT
D.D. Gilboe and **D.J. Costello,** Depts. of Neurosurgery and Physiology, University of Wisconsin School of Medicine, Madison, USA

15.45 MAPPING LOCAL CEREBRAL FUNCTIONAL ACTIVITY BY MEASUREMENT OF LOCAL CEREBRAL GLUCOSE UTILIZATION WITH RADIOACTIVE 2-DEOXYGLUCOSE
L. Sokoloff, National Institute of Mental Health, Bethesda, MD, USA

16.00 BRAIN BIOCHEMISTRY AND METABOLISM MEASURED IN VIVO WITH POSITRON EMISSION TOMOGRAPHY (PET)
M.E. Raichle, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO, USA

16.15 DETERMINATION OF LOCAL CEREBRAL GLUCOSE METABOLIC RATE (LCMRGlc) IN MAN WITH EMISSION COMPUTED TOMOGRAPHY
M.E. Phelps, Div. of Nuclear Medicine, UCLA School of Medicine, CA, USA

16.30 GENERAL DISCUSSION

(Supported in part by the Israel Center for Psychobiology)

MONDAY, SEPTEMBER 3, 1979

15.00—17.30 **Hall C**

SYMPOSIUM/WORKSHOP — SW3

FUNCTIONAL ROLES OF TAURINE, GABA AND AMINO ACIDS

Chairmen: **P. Mandel,** France
K. Kuriyama, Japan

15.00 GABA NEURONES AND THEIR INTERACTION WITH CENTRAL CATECHOLAMINE
K. Fuxe, M. Perez de la Mora, K. Andersson, T. Hökfelt, A. Ljungdahl and **P. Eneroth,** Dept. of Histology, Karolinska Institutet, Stockholm, Sweden

15.15 GABA BINDING PROCESSES IN RAT CNS
F.V. De Feudis, L. Ossola, A. Elkouby and **P. Mandel,**
Centre de Neurochimie du CNRS et Institut de Chimie Biologique,
Faculté de Médecine, Strasbourg Cedex, France

15.30 GABA IN HUMAN POST-MORTEM BRAIN FROM CONTROL, PSYCHOTIC AND HUNTINGTON'S CHOREA SUBJECTS
E.G.S. Spokes, N.J. Garrett and **L.L. Iversen,** M.R.C. Neurochemical *Pharmacology Unit, University of Cambridge,* Addenbrooke's Hospital, UK

15.45 TAURINE AND GABA COMMON PATTERNS
P. Mandel, P.F. Urban and **M. Recasens,**
Centre de Neurochimie du CNRS, Strasbourg, France

16.00 POSSIBLE ROLES OF TAURINE AS A NEUROMODULATOR
K. Kuriyama, Dept. of Pharmacology, Kyoto Prefectural University of Medicine, Kamikyo-ku, Japan

16.15 MECHANISMS OF TAURINE ACTION IN THE CENTRAL NERVOUS SYSTEM
H. Pasantes-Morales, Centro de Investigaciones en Fisiologia Celular, Universidad de México, México

16.30 TAURINE IN NUTRITION
J.A. Sturman, Developmental Neurochemistry Lab., Dept. of Pathological Neurobiology, Institute of Basic Research in Mental Retardation, Staten Island, NY, USA

16.45 TAURINE AND BRAIN DEVELOPMENT
D.K. Rassin and **G.E. Gaull,** Dept. of Human Development and Nutrition, NY State Institute Basic Research in Mental Retardation, Staten Island, NY, USA

17.00 THE INFLUENCE OF TAURINE ON GLUTAMIC ACID CONTENT OF CEREBRAL TISSUE
N.M. van Gelder and **M. Parent,** Centre de Recherche en Sciences Neurologiques, Université de Montréal, Que., Canada

17.15 GENERAL DISCUSSION

MONDAY, SEPTEMBER 3, 1979

15.00—17.00 **Hall D**

ORAL COMMUNICATION SESSION — OC1

NEUROCHEMISTRY OF CONVULSIONS AND CHEMICAL PATHOLOGY OF BRAIN

Chairman: **M.M. Rapport,** USA

15.00 EFFECT OF ANTIEPILEPTIC DRUGS ON SERUM LIPIDS. CORRELATIONS WITH THE THERAPY EFFECTIVENESS IN EPILEPSY
R. Rogozea, V. Florea-Ciocoiu, C. Balaita and **N. Luca,** Institute of Neurology and Psychiatry, Sos. Berceni, Bucharest, Romania

15.15 FREE ARACHIDONIC ACID IN THE BRAIN DURING CONVULSION BY PENTYLENETETRAZOL OR ELECTROSHOCK
G.D. Cascone de Suárez and **N.G. Bazán,** Instituto de Investigaciones Bioquímicas, Universidad Nacional del Sur-Consejo Nacional de Investigaciones Cientificas y Técnicas, Bahía Blanca, Argentina

15.30 IMMUNONEUROLOGICAL MODEL OF EPILEPSY. BIOLOGICAL POTENCY OF ANTIGANGLIOSIDE SERA
M.M. Rapport, S.E. Karpiak and **L. Graf,** N.Y. State Psychiatric Institute and Columbia University, NY, USA

15.45 SYNAPTIC PROTEINS AFTER ELECTROCONVULSIVE STIMULATION
T.G. Bolwig and **O.S. Jørgensen,** Dept. of Psychiatry and Psychochemistry Institute, Rigshospitalet, Copenhagen, Denmark

16.00 MUSCARINIC MECHANISMS IN THE KINDLED EPILEPTIC FOCUS
C.G. Wasterlain, V. Jonec, E. Csiszar and **A. Morin,** Epilepsy Research Lab., Sepulveda VA Medical Center, UCLA, CA, USA

16.15 PROTEIN GLYCOSYLATION BY HUNTINGTON'S CHOREA FIBROBLASTS
W.-Y. Hung and **A. Tourian,** Cell Biology and Neurogenetics Lab., Duke University Medical Center, Durham, NC, USA

16.30 A DIAGNOSTIC TEST FOR ACTIVE DEMYELINATION: MYELIN BASIC PROTEIN IN CEREBROSPINAL FLUID
S.R. Cohen and **G.M. McKhann,** Johns Hopkins University, Baltimore, MD, USA

16.45 BRAIN GANGLIOSIDES IN THE PATIENTS WITH PRESENILE PROGRESSIVE DEMENTIA
Y. Ohtani, Y. Tamai, H. Kojima and **S. Miura,** Dept. of Neuropsychiatry and Biochemistry, Kitasato University School of Medicine, Sagamihara, Japan

MONDAY, SEPTEMBER 3, 1979

15.00—17.30 **Hall E**

ORAL COMMUNICATION SESSION — OC2

HORMONES AND NEUROTRANSMITTERS

Chairman: **M. Ben-David,** Israel

15.00 EFFECTS OF SEX STEROIDS AT THE HYPOTHALAMIC LEVEL IN THE CONTROL OF PROLACTIN SECRETION
L. Ferland and **F. Labrie,** MRC Group in Molecular Endocrinology, Le Centre Hospitalier de l'Université Laval, Que., Canada

15.15 A COMPARISON OF SULPIRIDE AND PROLACTIN ACTIVITY ON DOPAMINERGIC SYSTEM IN THE RAT BRAIN
P. Portaleone, R. Di Carlo, C. Ferretti, G. Muccioli and **E. Genazzani,** Istituto di Farmacologia (I e II Cattedra), Università di Torino, Italy

15.30 EFFECTS OF SEX STEROIDS ON DOPAMINE ACTION AT THE PITUITARY LEVEL
F. Labrie, R. Veilleux and **J.P. Raynaud,** MRC Group in Molecular Endocrinology, Le Centre Hospitalier de l'Université Laval, Que., Canada, and Centre de Recherches Roussel UCLAF, Romainville, France

15.45 SERUM MSH LEVELS AND PITUITARY MSH CONTENT DURING PSEUDOPREGNANCY IN THE RAT
M. Volosin and **M.E. Celis,** Instituto de Investigación Médica Mercedes y Martín Ferreyra, Córdoba, Argentina

16.00 GLUCOCORTICOIDS DECREASE LYOSOMAL ENZYMES IN MOUSE BRAIN, HEART, LIVER AND KIDNEY, BUT INDUCE ARYLSULFATASE B IN KIDNEY PROXIMAL TUBULES
H. Koenig, A. Goldstone, G. Blume and **C. Hughes,** Neurology Svc, VA Lakeside Medical Center & Neurology and Biochemistry Depts., Northwestern University Medical School, Chicago, IL, USA

16.15 STEROIDS INTERFERE WITH HISTAMINE RECEPTORS IN RAT HYPOTHALAMUS
P. Portaleone, A. Crispino, G. Pagnini, P. Venutti and **E. Genazzani,** Istituto di Farmacologia, Università di Torino, Italy

MONDAY, SEPTEMBER 3, 1979

15.00—17.30 **Hall F**

ORAL COMMUNICATION SESSION — OC3

NEUROCHEMISTRY AND TISSUE CULTURE

Chairman: **E. Yavin,** Israel

15.00 DIFFERENTIAL GLIAL EXPRESSION IN "YOUNG" AND "OLD" PASSAGES OF C-6 GLIAL CELLS
A. Vernadakis, M. Norenberg and **K. Parker,** Depts. of Psychiatry, Pathology and Pharmacology, University of Colorado, School of Medicine and VA Hospital, Denver, Co, USA

15.15 EFFECT OF NOREPINEPHRINE ON S-100 PROTEIN LEVEL IN RAT GLIAL CELLS
G. Labourdette and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg, France

15.30 PHOSPHOLIPASES IN CULTURED GLIAL CELLS
A.D. Edgar, L. Freysz and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg, France

15.45 INFLUENCE OF LECTIN COMPOUNDS ON THE PROLIFERATION OF GLIAL CELLS IN TISSUE CULTURE
V.K. Singh, Div. of Immunology, Children's Hospital, Vancouver, BC, Canada

16.00 FURTHER BIOCHEMICAL AND PHYSIOLOGICAL STUDIES OF POTASSIUM TRANSPORT IN MAMMALIAN ASTROGLIA IN VITRO
G. Franck, G. Moonen, P. Doyen and **I. Selak,** Institute of Medicine — Neurology, University of Liège, Belgium

16.15 THE INVOLVEMENT OF GANGLIOSIDES IN GROWTH AND DEVELOPMENT OF CULTURED NEURONAL AND GLIAL CELLS
J. Morgan and **W. Seifert,** Max-Planck-Institüt, Tübingen, West Germany

16.30 ISOLATION OF PROLIFERATING HYBRID CELLS EXPRESSING BIOCHEMICAL FUNCTIONS OF THEIR OLIGODENDROCYTE PARENT
F.A. McMorris*, S. Miller*, O. Abramsky+, D. Pleasure, D. Silberberg**** and **H. Koprowski*,** *The Wistar Institute, Philadelphia, USA; +Hadassah Medical Center, Jerusalem, Israel; **Dept. of Neurology, University of Pennsylvania, PA, USA

16.45 RELEASE AND UPTAKE OF CATECHOLAMINES BY CHROMAFFIN CELLS IN CULTURE
J.M. Trifaró, R.L. Kenigsberg and **R.W.H. Lee,** Dept. of Pharmacology, McGill University, Montreal, Canada

17.00 EFFECTS OF HISTOLOGICAL PREPARATION ON THE DIMENSIONS OF MAMMALIAN CEREBRAL TISSUE
H. Hillman and **K. Deutsch,** Unity Lab., University of Surrey, UK

MONDAY, SEPTEMBER 3, 1979

20.30—22.30 **Hall F**

ROUND TABLE — RT1

ENVIRONMENTAL NEUROTOXICITY*

Organizer: **Y. Kimhi,** Israel

Participants: **N. Brookes,** USA
E. Egana, Chile
F. Fonnum, Norway
J. O'Neill, USA
R. Rahamimoff, Israel
H. Schaumburg, USA
P. Spencer, USA
A. Bischoff, Switzerland
J. van den Bercken, Netherlands
M. Sabri, USA
B. Bernard, USA
E. Silbergeld, USA

20.30—22.30 **Hall D**

ROUND TABLE — RT2

NUCLEIC ACIDS*

Organizer: **O Sellinger,** USA

Participants: **Brown,** Canada
Kuenzle, Switzerland
Takahashi, Japan
Giuffrida, Italy
Lim, U.K.
Sellinger, USA
Austin, Australia

20.30—22.30 **Hall C**

ROUND TABLE — RT3

IMMUNOCHEMICAL APPROACHES TO ANALYSIS OF COMPONENTS OF THE NERVOUS SYSTEM*

Organizers: **E. Bock,** Denmark
S. Fuchs, Israel

Participants: **B.W. Moore,** USA
J. Mallet, France
M. Kies, USA
S. Fuchs, Israel
R. Kelly, USA
E. Bock, Denmark

* A synopsis of this Round Table appears in the Abstract Book.

MONDAY, SEPTEMBER 3, 1979

20.30—22.30 **Hall A**

ROUND TABLE — RT4

DEVELOPMENTAL NEUROENDOCRINOLOGY*

Organizers: **J. McKelvey**, USA
A. Kaye, Israel

Participants: **P. Timiras**, USA
S. Geel, USA
A. Kaye, Israel
L. Lim, UK
H. Thoenen, Switzerland
P. Thomas, UK
R. Balazs, UK
S. Schanberg, USA
J. de Vellis, USA

20.30—22.30 **Hall B**

ROUND TABLE — RT5

CONVERSION AND INACTIVATION OF NEUROPEPTIDES*

Organizers: **N. Marks**, USA
M. Benuck, USA

Participants: **N. Marks**, USA
M. Benuck, USA
H. Gainer, USA
E.C. Griffiths, UK
P. Cohen, France
Y. Koch, Israel

* A synopsis of this Round Table appears in the Abstract Book.

TUESDAY, SEPTEMBER 4, 1979

08.30—12.30 **Hall B**

SYMPOSIUM — S1

NERVE GROWTH FACTOR

Chairmen: **H. Thoenen,** West Germany
E.M. Shooter, USA

08.30 NERVE GROWTH FACTOR: STRUCTURAL AND MECHANISTIC CONSIDERATIONS
R.A. Bradshaw, N.V. Costrini, E.M. Johnson, M. Kogan, J.S. Rubin and **K.A. Thomas,** Depts. of Biological Chemistry, Medicine, and Pharmacology, Washington University School of Medicine, MO, USA

08.50 THE STRUCTURE AND BIOSYNTHESIS OF NERVE GROWTH FACTOR
E.M. Shooter, Dept. of Neurobiology, Stanford University School of Medicine, CA, USA

09.10 THE STRUCTURE OF NERVE GROWTH FACTOR: A COMPARATIVE APPROACH
J.R. Perez-Polo, Dept. of Human Biological Chemistry and Genetics, The University of Texas Medical Branch, Galveston, USA

09.30 NERVE GROWTH FACTOR (NGF) IN THE PROSTATE GLANDS AND SEMINAL PLASMA OF THE GUINEA PIG, RABBIT AND BULL
G.P. Harper, Dept. of Neurochemistry, Max-Planck-Institut für Psychiatrie, Martinsried/München, West Germany

09.50 Coffee Break

10.20 NERVE GROWTH FACTOR (NGF) AND DEVELOPMENT OF THE EMBRYONIC NERVOUS SYSTEM
I.B. Black, J.A. Kessler and **P. Cochard,** Lab. of Developmental Neurology, Cornell University Medical College, NY, USA

10.40 RELATIONSHIP BETWEEN ULTRASTRUCTURAL LOCALIZATION AND MECHANISM OF ACTION OF NERVE GROWTH FACTOR
H. Thoenen, Max-Planck-Institut für Psychiatrie, Dept. of Neurochemistry, Martinsried/München, West Germany

11.00 NERVE GROWTH FACTOR-INDUCED INTRACELLULAR EVENTS IN RAT SUPERIOR CERVICAL GANGLIA
G. Guroff and **M-y. Yu,** LDN, NICHD, NIH, Bethesda, MD, USA

11.20 PRIMING: THE NGF-MEDIATED ACQUISITION OF THE CAPACITY FOR NEURITE OUTGROWTH
L.A. Greene, D.E. Burstein and **M.M. Black,** Depts. of Pharmacology and Pathology, New York University Medical Center, USA

11.40 PHEOCHROMOCYTOMA CELL LINES AS MODELS OF NEURONAL GENE EXPRESSION
H.R. Herschman, R. Goodman and **C. Chandler,** University of California, Los Angeles, USA

12.00 BINDING AND POSSIBLE INTERNALIZATION OF THE NERVE GROWTH FACTOR (NGF) IN PHEOCHROMOCYTOMA CELLS
P. Calissano, A. Levi and **C. Cozzari,** Lab. of Cell Biology, CNR, Rome, Italy

TUESDAY, SEPTEMBER 4, 1979

08.30—12.30 **Hall D**

SYMPOSIUM — S2

BIOCHEMISTRY OF NEUROMUSCULAR DISEASE

Organized by: **S. Appel**

Chairmen: **S. Appel,** Israel
S. Fuchs, Israel

08.30 MYASTHENIA GRAVIS: BIOCHEMICAL AND IMMUNOLOGICAL ANALYSIS
S. Fuchs, The Weizmann Institute of Science, Rehovot, Israel

09.05 DISORDERS OF GLYCOGEN AND LIPID METABOLISM
S. DiMauro, Columbia University, NY, USA

10.15 Coffee Break

10.45 MEMBRANE ABNORMALITIES IN THE MUSCULAR DYSTROPHIES
S. Appel, M. Merikel, G. Plishker and **P. Chauvin,**
Dept. of Neurology, Baylor College of Medicine, Houston, TX, USA

10.55 ERYTHROCYTE MEMBRANE GLYCOPROTEIN STUDIES IN MYOTONIC MUSCULAR DYSTROPHY
P. Wong, K.L. Hull and **A.D. Roses,** Howard Hughes Medical Institute Lab., Duke University Medical School, Durham, NC, USA

11.30 REGULATION OF THE INSULIN RECEPTOR IN MYOTONIC DYSTROPHY
B.W. Festoff and **W.V. Moore,** VA Medical Center and University of Kansas Medical Center, Kansas City, MO and Kansas City, KS, USA

12.05 CHANGES IN LEVELS AND FORMS OF ACETYLCHOLINESTERASE AND PSEUDOCHOLINESTERASE DURING DEVELOPMENT OF NORMAL AND DYSTROPHIC CHICKEN MUSCLE
I. Silman, J.M. Lyles and **E.A. Barnard,** Dept. of Biochemistry, Imperial College, London, UK

TUESDAY, SEPTEMBER 4, 1979

08.30—12.30 **Hall A**

ORAL COMMUNICATION SESSION — OC4

METABOLISM OF THE NERVOUS SYSTEM — I

Chairman: **C. Allweis,** *Israel*

08.30 SUBFRACTIONATION OF MOUSE BRAIN MICROSOMES ON A CONTINUOUS SUCROSE GRADIENT: ISOLATION AND IDENTIFICATION OF THE MEMBRANES CONTAINING CERAMIDE GALACTOSYLTRANSFERASE AND CEREBROSIDE-SULFOTRANSFERASE
H.P. Siegrist, T. Burkart, U. Wiesmann and **N. Herschkowitz,**
Dept. of Pediatrics, University of Berne, Switzerland

08.45 EFFECT OF BRANCHED CHAIN FATTY ACIDS ON MITOCHONDRIAL GAMMA-AMINOBUTYRATE (GABA) METABOLISM
D.D. Clarke, J. Cunningham and **W.J. Nicklas*,** Chemistry Dept.,
Fordham University, NY, USA; *Mt. Sinai School of Medicine, NY, USA

09.00 THE FEASIBILITY OF A RADIOCHEMICAL MYELIN STAIN
B.W. Agranoff, C. Boast, B. Dudzinski, K. Frey and **D. Wieland,**
University of Michigan, Ann Arbor, USA

09.15 DEVELOPMENTAL CHANGES IN CEREBELLAR CELL SURFACE PROTEINS
I. **Stuhlfauth** and **N.W. Seeds,** Dept. of Biochemistry/Biophysics and Genetics,
University of Colorado Medical Center, Denver, USA

09.30 EtOH and AcCHO EFFECT ON RESTING (STATE 4) AND ACTIVATED (STATE 3) OF CNS RESPIRATORY PROCESS IN "A.G." AND "A.G./H_2O" RATS: ACTION OF SITE I SUBSTRATES
E. Egaña, M.T. Ramirez and **S. Schoelermann,** University of Chile,
Faculty of Medicine, Institute of Experimental Medicine, Lab. of Neurochemistry,
Hospital J.J. Aguirre, Santiago, Chile

09.45 BRAIN (Na^+ + K^+)-ATPase FUNCTION IN RATS FROM A COLONY FED DILUTE EtOH FOR MANY GENERATIONS ("A.G." RATS)
R. Rodrigo, E. Egaña and **R. Campos,** University of Chile, Faculty of Medicine,
Institute of Experimental Medicine, Lab. of Neurochemistry,
Hospital J.J. Aguirre, Santiago, Chile

10.00 Coffee Break

ORAL COMMUNICATION SESSION — OC4 (Continued)

10.30 USE OF ISOLATED NEURONS IN CULTURE FOR MEASUREMENTS AND CORRELATIONS OF O_2 CONSUMPTION AND ENERGY METABOLISM
B.F. Roth-Schechter, G. Tholey and **P. Mandel,** Laboratoire de Pharmacodynamie, Biochimie Microbienne et Centre de Neurochimie, Université L. Pasteur, Strasbourg, France

10.45 LOCATION OF AEROBIC GLYCOLYSIS IN THE BRAIN: EFFECTS OF NEUROTROPIC DRUGS AND OF METABOLIC INHIBITORS ON CEREBRAL METABOLIC PROCESSES
A.M. Benjamin and **Z.H. Verjee,** Div. of Neurological Research, Dept. of Psychiatry, University of British Columbia, Vancouver, Canada

11.00 INHIBITION OF GLYCOLYSIS BY CHEMICALLY UNRELATED INDUSTRIAL NEUROTOXINS WHICH PRODUCE POLYNEUROPATHY
M.I. Sabri and **P.S. Spencer,** Program for Environmental Neurotoxicology and Teratology, Albert Einstein College of Medicine, NY, USA

11.15 ROLE OF ERYTHROCYTE CARBONIC ANHYDRASE IN OXYGEN DELIVERY TO BRAIN
B. Laux and **M.E. Raichle,** Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO, USA

11.30 BIOSYNTHESIS OF ISETHIONATE FROM TAURINE
J.H. Fellman, E.S. Roth and **N.A. Avedovech,** Dept. of Biochemistry, University of Oregon Health Sciences Center, Portland, USA

11.45 DO METABOLICALLY INTERACTING NERVE ENDINGS AND ASTROCYTES CONSTITUTE THE "SMALL COMPARTMENT" OF GLUTAMATE WHICH PREFERENTIALLY GIVES RISE TO GLUTAMINE?
L. Hertz* and **A. Schousboe,** *Dept. of Anatomy, University of Saskatchewan, Saskatoon, Canada and Dept. of Biochemistry, University of Copenhagen, Denmark

12.00 IDENTIFICATION OF 3, 4,-DIHYDROXYPHENYLLACTIC ACID IN THE URINE OF RATS INJECTED WITH L-DOPA
G.D. Cherayil and **M.E. Sellers,** Dept. of Pathology, The Medical College of Wisconsin, Milwaukee, and Clinical Investigation Service, WBAMC, El Paso, TX, USA

TUESDAY, SEPTEMBER 4, 1979

08.30—12.30 **Hall C**

ORAL COMMUNICATION SESSION — OC5

BIOCHEMISTRY OF NEUROTRANSMITTERS I

Chairman: **J.R. Cooper**, USA

08.30 REGULATION OF ACETYLCHOLINE BIOSYNTHESIS IN DEVELOPING CHOLINERGIC SYNAPSES
E. Giacobini, M. Marchi and **D.W. Hoffman**, Lab. of Neuropsychopharmacology, Dept. of Biobehavioral Sciences, The University of Connecticut, Storrs, USA

08.45 THE EFFECT OF ACETYLCHOLINE RELEASE ON CHOLINE UPTAKE
R.M. Marchbanks, S. Wonnacott and **A. Carrasco**,
Dept. of Biochemistry, Institute of Psychiatry, London, UK

09.00 MUSCARINIC AUTORECEPTORS REGULATE ACETYLCHOLINE RELEASE IN SYNAPTOSOMES FROM RAT HIPPOCAMPUS
O. Nordström and **T. Bartfai**, Dept. of Biochemistry, Arrhenius Lab., *University of Stockholm, Sweden*

09.15 THE EFFECT OF TITYUSTOXIN AND IONOPHORE A-23187 ON THE RELEASE OF ACETYLCHOLINE FROM CORTICAL SLICES OF RAT BRAIN
M.V. Gomez and **B.A. Ladeira**, Depto. de Bioquímica, Instituto de Ciencias Biológicas da UFMG, Belo Horizonte, Brasil

09.30 PURIFICATION AND IMMUNOCHEMICAL STUDIES OF GABA-, ACETYLCHOLINE-, AND TAURINE-SYNTHESIZING ENZYMES FROM BOVINE AND FISH BRAINS
J.-Y. Wu*, **Y.Y.T. Su****, **C. Brandon***, **D.M.K. Lam****, **M.S. Chen***, and **W.M. Huang***, Dept. of Cell Biology* and Cullen Eye Institute**, Baylor College of Medicine, Houston, TX, USA

09.45 STORAGE OF DOPAMINE AND ACETYLCHOLINE IN GRANULES OF PC12, A CLONAL CELL LINE
B.D. Howard, W.P. Melega, R.V. Rebois, E.E. Reynolds and **L. Toll**,
UCLA School of Medicine, CA, USA

10.00 Coffee Break

ORAL COMMUNICATION SESSION — OC5 (Continued)

10.30 THE SOLUBLE BRAIN FRACTION MODIFIES THE EFFECT OF CATECHOLAMINES AND 5-HYDROXYTRYPTAMINE ON Na^+K^+ATPase OF NERVE ENDING MEMBRANES
G. Rodríguez de Lores Arnaiz and **M. Antonelli,** Instituto de Biología Celular, Facultad de Medicina, UBA, Buenos Aires, Argentina

10.45 EXISTENCE AND DIFFERENTIAL STIMULATION OF OCTOPAMINE RECEPTORS IN THE BRAIN OF GREGARIOUS, SOLITARY AND CO_2-TREATED LOCUST Locusta migratoria L
J.-C. David and **S. Fuzeau-Braesch,** Lab. de Biochimie du Développement, IRBM, Université Paris VII, France and Lab. de Biologie de l'Insecte, Université Paris XI, Orsay, France

11.00 THE EFFECT OF IMIDAZOL AND $\alpha\beta$ METHYLENE-ATP ON cAMP INCREASE INDUCED BY SEROTONIN IN APLYSIA
M. Brunelli, F. Belardetti, C. Biondi, P. Ferretti and **A. Trevisiani,** Istituto di Fisiologia, University of Pisa and Istituto di Fisiologia Gen. University of Ferrara, Italy

11.15 SYNAPTOSOMES FROM THE GUINEA PIG ILEUM
C.A. Briggs and **J.R. Cooper,** Dept. of Pharmacology, Yale University School of Medicine, New Haven, CT, USA

11.30 REDUCTION OF SUBSTANCE P LEVELS IN THE VENTRAL CERVICAL SPINAL CORD OF THE RAT AFTER INTRACISTERNAL 5,7-DIHYDROXYTRYPTAMINE INJECTION
E. Singer, G. Sperk, P. Placheta and **S.E. Leeman,** Pharmakologisches Institut der Universität, Vienna, Austria

11.45 INACTIVATION OF SUBSTANCE P AND SOME OF ITS ANALOGUES BY RAT BRAIN SYNAPTOSOMES
S. Blumberg* and **V.I. Teichberg****, Depts. of Biophysics* and Neurobiology**, The Weizmann Institute of Science, Rehovot, Israel

TUESDAY, SEPTEMBER 4, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P3

PEPTIDES AND HORMONES

Please see the General Information section regarding the display of posters

Poster No.

1 STRIATAL DOPAMINE-SENSITIVE ADENYLATE CYCLASE ACTIVITY FOLLOWING LESIONS OF THE NIGRO-STRIATAL DOPAMINERGIC SYSTEM AND CHRONIC ESTROGEN TREATMENT IN THE RAT
N. Barden, A. Dupont, D. Rouleau and **F. Labrie,** MRC Group in Molecular Endocrinology, Le Centre Hospitalier de l'Université Laval, Que., Canada

3 ACTH AND α-MSH IN SECRETORY GRANULES
A. Barnea, G. Cho and **J.C. Porter,** Depts. of Obstetrics and Gynecology and Physiology, Green Center for Reprod. Biol. Sciences, Southwestern Medical School, Dallas, TX, USA

4 OPIATES AND OPOID PEPTIDES INHIBIT GANGLIOSIDE AND GLYCOPROTEIN SYNTHESIS IN NEUROBLASTOMA N4TG1 AND NG108-15
G. Dawson, R.W. McLawhon and **R.J. Miller,** University of Chicago, Dept. of Pediatrics, IL, USA

2 REGIONAL DISTRIBUTION OF NEUROTENSIN, SUBSTANCE P, SOMATOSTATIN, THYROTROPIN, CORTICOTROPIN, LYS-VASOPRESSIN AND OPIATE PEPTIDES IN BOVINE AND RAT BRAIN
A. Dupont, P. Langelier, Y. Mérand, J. Côté and **N. Barden,** Lab. d'Endocrinologie Moléculaire, CHUL, Que., Canada

5 DISTRIBUTION OF SOMATOSTATIN IN THE AMYGDALOID COMPLEX AND STRIATUM
J. Epelbaum, Y. Ben-Ari*, L. Tapia-Arancibia, O.P. Ottersen* and **C. Kordon,** Unité 159 de l'INSERM, Paris and *Lab. de Physiologie Nerveuse du CNRS, Gif-sur-Yvette, France

6 EFFECTS OF MIF-1 ON RAT BRAIN CYCLIC-GMP IN VIVO AND GUANYLATE CYCLASE IN VITRO
A.R. Gerber, C.W. Christensen and **M.A. Spirtes,** Veterans Administration Medical Center, New Orleans, LA, USA

7 ISOLATION ON A PERCOLL GRADIENT OF PURIFIED SECRETORY GRANULES FROM BOVINE NEUROHYPOPHYSES
M. Gratzl and **N.A. Thorn,** Dept. of Physiological Chemistry, University of Saarland, West Germany and Institute of Medical Physiology C, University of Copenhagen, Denmark

8 INACTIVATION OF TRH AND TRH-OH BY RAT BRAIN
E.C. Griffiths, J.A. Kelly, W. Klootwijk* and **T.J. Visser*,** Dept. of Physiology, University of Manchester, UK and *Dept. of Internal Medicine III, Erasmus University, Rotterdam, The Netherlands

POSTER PRESENTATION P3 (Continued)

Poster No.

9 MIF AND PAREPTIDE: BREAKDOWN IN BRAIN
K.-S. Hui, A. Lajtha and **I. Boksay,** Center for Neurochemistry, Ward's Island and Ayerst Labs., NY, USA

10 INFLUENCE OF MELATONIN IMPLANTS IN THE HYPOTHALAMUS ON THE FEED BACK EFFECTS OF TESTOSTERONE ON GONADOTROPINS SECRETION
M. Mas, A. Aranda, M.C. Gonzalez and **C. Santana,** Depto. de Fisiología, Facultad de Medicina, Universidad de La Laguna, Tenerife, Canary Islands, Spain

11 IMMUNOHISTOCHEMICAL STUDIES OF A PHOSPHOPROTEIN BAND (B-50), MODULATED IN RAT BRAIN MEMBRANES BY ACTH
A.B. Oestreicher, H. Zwiers, P. Schotman and **W.H. Gispen,** Div. of Molecular Neurobiology, Institute of Molecular Biology, University of Utrecht, The Netherlands

12 ACCELERATION OF 5-HT UPTAKE BY HUMAN BLOOD PLATELETS IN ALCOHOL WITHDRAWAL SYNDROME
G.F. Oxenkrug, Biochemical Unit, Lab. of Psychopharmacology, Bekhterev Psychoneurological Research Institute, Leningrad, USSR

13 EFFECT OF THYROID DISFUNCTION UPON BIOSYNTHESIS OF PHOSPHATIDYLCHOLINE IN RAT BRAIN AND LIVER MITOCHONDRIA AND MICROSOMES
J.M. Pasquini, I. Faryna de Raveglia and **E.F. Soto,** Depto. Química Biológica, Facultad Farmacia Y Bioquímica, Universidad de Buenos Aires, Argentina

14 EFFECT OF NALOXONE ON COPULATORY BEHAVIOR IN NON-COPULATORS AND IN CASTRATED MALE RATS
B. Pellegrini-Quarantotti, E. Paglietti, M. Petta, A. Bonanni and **G.L. Gessa,** Institute of Pharmacology, University of Cagliari, Italy

15 ANGIOTENSIN-I (AI) GENERATING ENZYME IN HUMAN CEREBROSPINAL FLUID (CSF)
J.L. Ram and **G.J.W. Natho,** Dept. of Physiology, Wayne State University, School of Medicine, Detroit, MI, USA

16 AN EXAMINATION OF THE RECEPTOR INTERACTION OF FLEXIBLE PEPTIDE LIGANDS AT THE MOLECULAR LEVEL
C.R. Snell, Lab. of Peptide Chemistry, National Institute for Medical Research, London, UK

17 BIOCHEMICAL REGULATORY INFLUENCES OF GLUCOCORTICOIDS IN SUPERIOR CERVICAL GANGLION
P.Y. Sze, Dept. of Biobehavioral Sciences, The University of Connecticut, Storrs, USA

TUESDAY, SEPTEMBER 4, 1979

13.30—15.00 **Garden/Lobby**

POSTER PRESENTATIONS P4
MYELIN AND GANGLIOSIDES

Please see the General Information section regarding the display of posters

Poster No.

18 HUMAN BRAIN LCAT IN DEMYELINATING AND MYELINOCLASTIC DISEASES: A POSSIBLE MECHANISM FOR CHOLESTERYL ESTERS FORMATION
L. Amaducci*, L. Bartolini*, P. Antuono*, C. Franco*, F. Balzi+, C. Paci+ and **G. Porcellati+**, *Dept. of Neurology, University of Florence and +Institute of Biochemistry, University of Perugia, Italy

19 FURTHER EVIDENCES ON THE PRESENCE OF GALACTOSE CONTAINING GLYCOPEPTIDES IN GM_1 GANGLIOSIDOSIS BRAIN
B. Berra, C. Lindi, S. di Palma and **S. Rapelli,** Chair of Biochemistry, College of Pharmacy, University of Milan, Italy

20 LABELING OF GANGLIOSIDES AND GLYCOPROTEINS FROM OPTIC TECTUM AFTER AN INTRAOCULAR INJECTION OF ^{3}H-ManNAc IN ANIMALS IN LIGHT AND DARK
B.L. Caputto, G.A. Nores, A.H.R. Maccioni and **R. Caputto,** Depto. de Química Biológica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Ciudad Universitaria, Argentina

21 PERTURBATION OF PHOSPHOLIPID BILAYER STRUCTURE BY GANGLIOSIDES
B. Cestaro, G. Cervato, M. Ciampa and **G. Tettamanti,** Dept. of Biol. Chemistry, Faculty of Medicine, Milan, Italy

22 RADIOIMMUNOCHEMICAL DETERMINATION OF MYELIN BASIC PROTEIN (MBP) IN THE BRAIN OF NORMAL AND DYSMYELINATING MUTANT MICE DURING DEVELOPMENT
A. Delassalle, P. Cesselin, F. Lachapelle, J.C. Legrand and **C. Jacque,** Biochimie Médicale CHU, Pitié-Salpêtrière, Paris, France

23 IDENTIFICATION OF 2 FORMS OF ARYLSULFATASE A. RELATIONS WITH CEREBROSIDE SULFATASE IN LIVER AND BRAIN
G. Dubois and **N. Baumann,** INSERM U134, CNRS, ERA 421 Lab. de Neurochimie, Hôpital de la Salpêtrière, Paris, France

24 INHIBITION BY METHYLMERCURY AND TRIETHYLLEAD OF GALACTOLIPID ACCUMULATION IN MYELINATING CEREBELLUM SLICES OF RAT AND OF GALACTOLIPID SYNTHESIZING ENZYME ACTIVITIES
I.K. Grundt, Lab. of Clinical Biochemistry, University of Bergen, Norway

25 INTERACTION BETWEEN MYELIN BASIC PROTEIN AND GANGLIOSIDES
R.I. Jacobson and **R.K. Yu,** Dept. of Neurology, Yale University School of Medicine, New Haven, CT, USA

POSTER PRESENTATIONS P4 (Continued)

Poster No.

27 EXCHANGE OF PHOSPHOLIPIDS BETWEEN MYELIN AND MICROSOMAL MEMBRANES
F.B. Jungalwala, P. Ruenwongsa and **H. Singh,** Dept. of Biochemistry, Eunice Kennedy Shriver Center, Waltham, MA, USA

28 DEMYELINATION AND REMYELINATION: EFFECT ON AXONAL METABOLISM IN THE CHICKEN SCIATIC NERVE
A. Kidman, M. Hanwell and **N. Cooper,** Neurobiology Unit, School of Life Sciences, N.S.W. Institute of Technology, Gore Hill, Australia

29 ENZYME ACTIVITIES AND GANGLIOSIDE COMPOSITION OF RAT BRAIN SMOOTH- AND ROUGH-SURFACED MEMBRANES
H. Kojima, Y. Tamai, M. Satake* and **T. Kurihara***, Dept. of Biochemistry, Kitasato University School of Medicine, Sagamihara and *Brain Research Institute, Niigata University, Japan

30 LIPID ANALYSIS IN THE TREMBLER SCIATIC NERVE
S. Larrouquere-Regnier, D. Darriet, F. Boiron, C. Cassagne and **J.M. Bourre,** Department de biochimie, Talence and INSERM U 134, Paris, France

31 ENVIRONMENT OF CHOLESTEROL IN BOVINE MYELIN
P. Marfey and **J. Parillo,** Center for Biological Macromolecules, Dept. of Biological Sciences, SUNY at Albany, NY, USA

32 EFFECT OF ESSENTIAL FATTY ACID DEFICIENCY ON THE METABOLIC STABILITY OF MYELIN PHOSPHOLIPIDS
S.L. Miller, D.M. Klurfeld and **D. Kritchevsky,** The Wistar Institute, Philadelphia, PA, USA

33 IN VIVO INCORPORATION OF EXOGENOUS (1-^{14}C) LIGNOCERIC ACID IN ISOLATED MYELIN, NEURONS AND ASTROCYTES
O. Morand, N. Gozlan-Devillierre, N. Baumann and **J.M. Bourre,** Lab. de Neurochimie, INSERM U134, Hôpital de la Salpêtrière, Paris, France

34 DISSOCIATION OF MYELIN AND ITS "ENZYME MARKERS" DURING ONTOGENY
T.V. Waehneldt, J.D. Lane and **J.-M. Matthieu,** Max-Planck-Institut für experimentelle Medizin, Neurochemie, Göttingen, West Germany and Service de Pédiatrie, CHUV, Lausanne, Switzerland

35 COMPARATIVE ELECTROPHORETIC STUDY OF THE WOLFGRAM PROTEIN REGION FROM DIFFERENT ANIMALS
T.V. Waehneldt and **J. Malotka,** Max-Planck-Institut für experimentelle Medizin, Neurochemie, Göttingen, West Germany

35A A COMPARATIVE STUDY ON THE GANGLIOSIDES OF RABBIT BRAIN REGIONS AFTER CONVULSIONS PRODUCED BY DIFFERENT CONVULSIVE SUBSTANCES
D. Kostic and A. Vranesevic, Institute of Biochemistry, Medical Faculty, University of Belgrade, Yugoslavia

TUESDAY, SEPTEMBER 4, 1979

13.30—15.00 Lobby/Garden

POSTER PRESENTATIONS — P5

NEUROCHEMICAL CHANGES IN PATHOLOGICAL CONDITIONS

Please see the General Information section regarding the display of posters

Poster No.

36 TAURINE AND OTHER AMINO ACIDS IN PLASMA AND PLATELETS IN RETINITIS PIGMENTOSA
E.M. Airaksinen, S. Oja, K.-M. Marnela and **P. Sihvola,** Dept. of Pharmacology, University of Kuopio and Institute of Biomedical Sciences, University of Tampere, Finland

37 SYSTEMIC CARNITINE DEFICIENCY IN CHILDHOOD
C. Angelini, P. Chapoy and **S. Cederbaum,** UCLA University Hospital, CA, USA and University of Padova Hospital, Italy

38 WATER CONTENT OF MS LESIONS
D.M. Becker, P. Duquette, I. Robitaille, M.E. Parks and **H.E. Hirsch,** UCLA Medical School, CA, USA

39 BENSERAZIDE, CARBIDOPA AND ISONIAZID EFFECTS ON TRYPTOPHAN OXIDATIVE METABOLISM BY RAT LIVER PREPARATIONS IN VITRO
D.A. Bender, Courtauld Institute of Biochemistry, The Middlesex Hospital Medical School, London, UK

40 STEREOCHEMISTRY OF HYDROXYCARBAMAZEPINE: COMPARISON WITH PHENYTOIN AND STRUCTURAL BASIS FOR ANTIEPILEPTIC ACTIVITY
A. Camerman and **N. Camerman,** Depts. of Neurology and Pharmacology, University of Washington, Seattle, USA and Dept. of Biochemistry, University of Toronto, Canada

41 SUBSTANCES RELATED TO 5-HYDROXYTRYPTAMINE IN PLASMA, LUMBAR CSF, VENTRICULAR CSF AND FRONTAL CORTEX OF PSYCHIATRIC PATIENTS WITH AND WITHOUT TRYPTOPHAN INFUSION
G Curzon, B.D. Kantamaneni, P. Van Boxel, P.K. Gillman, G.E. Holder, J.R. Bartlett and **P.K. Bridges,** Dept. of Neurochemistry, Institute of Neurology and Brook General Hospital, London, UK

42 OCTOPAMINE AND CENTRAL CIRCULATORY CONTROL IN RATS AND CATS
B. Delbarre, J.-C. David*, D. Casset-Senon and **G. Delbarre** with technical assistance of **N. Penot,** Lab. de Chirurgie Expérimentale, Faculté de Médecine, Tours Cedex and *Biochimie du Développement, I.R.B.M., Université Paris VII, France

43 SERUM AND CSF PROTEINS IN SCHIZOPHRENIA AND EXTRAPYRAMIDAL DISORDERS
D.Xh. Dida, M. Djordjevic, S. Simic and **Lj. Rakic,** Biochemical Institute, Medical Faculty, Pristina, Yugoslavia

TUESDAY, SEPTEMBER 4, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P5 (Continued)

Poster No.

45 PURIFICATION OF PLASMA MEMBRANES: METHODOLOGICAL STUDIES ON HUMAN AUTOPSY BRAINS
V. Hukkanen, H. Frey and **A. Salmi,** The Neurovirology Study Group, Depts. of Neurology and Virology, University of Turku, Finland

26 ISOLATION AND STRUCTURAL STUDY OF A NOVEL MONOSIALOGANGLIOSIDE FROM TAY-SACHS BRAIN
T. Itoh and **R.K. Yu,** Dept. of Neurology, Yale University School of Medicine, New Haven, CT, USA

47 TRYPTOPHAN METABOLISM AND 5HT IN SCHIZOPHRENIA
M.H. Joseph, Div. of Psychiatry, Clinical Research Centre, Harrow, Middlesex, UK

48 LEVELS OF ERYTHROCYTE 2,3 DPG AND ATP IN DUCHENNE MUSCULAR DYSTROPHY
A. Kalofoutis, J. Lekakis, N.J. Stratakis and **A. Bouloukos,** Dept. of Biological Chemistry, University of Athens, School of Medicine, Goudi, Greece

49 GAUCHER'S DISEASE: ESTIMATE OF GENE FREQUENCY AMONG ASHKENAZIM BY LEUKOCYTE β-GLUCOSIDASE ASSAY
E.H. Kolodny, S.S. Raghavan, J. Topol and **C. Spielvogel,** Eunice Kennedy Shriver Center for Mental Retardation, Inc., Waltham, MA, USA

50 CONTRIBUTION TO THE DISC ELECTROPHORETIC DETERMINATION OF CEREBROSPINAL FLUID PREALBUMIN IN PERSONS WITH MULTIPLE SCLEROSIS
L. Krzalic and **N. Kastrapeli,** Institute of Pathological Physiology, Faculty of Medicine, Belgrade, Yugoslavia

51 CHANGES IN THE URINARY PROTEIN PATTERN FOLLOWING CHEMICAL AND SURGICAL LESIONS IN RAT BRAIN
A. Langeland, R. Lund-Karlsen and **E. Kvamme,** Neurochemical Lab., The Oslo University Psychiatric Clinic, Norway

52 UPTAKE OF 5-HT BY BLOOD PLATELETS OF PATIENTS WITH MYOCLONUS EPILEPSY
E. Leino, E. Tukiainen, P.J. Riekkinen and **J. Tuomisto,** Depts. of Neurology and Pharmacology, University of Kuopio, Finland

46 WHITE MATTER MEMBRANE-BOUND GLYCOPROTEINS IN MULTIPLE SCLEROSIS
J. Newcombe, M.L. Cuzner, M. Röyttä and **H. Frey,** Dept. of Neurochemistry, Institute of Neurology, London, UK and Depts. of Pathological Anatomy and Neurology, University of Turku, Finland

POSTER PRESENTATIONS P5 (Continued)

Poster No.

53 STIMULATION OF ACTIVE E-ROSETTE FORMING LYMPHOCYTES BY MYELIN BASIC PROTEIN AND SPECIFIC ANTIGENS FROM MULTIPLE SCLEROSIS BRAINS
H. Offner, S.C. Rastogi, G. Konat and **J. Clausen,** The Neurochemical Institute, Copenhagen, Denmark

54 ISOLATION OF STORAGE MATERIAL FROM THE BRAINS OF PATIENTS WITH VARIOUS TYPES OF NEURONAL CEROID-LIPOFUSCINOSIS
J. Palo*, M. Haltia*, L.S. Wolfe and **N.M.K. Ng Ying Kin,**
*University of Helsinki, Finland and McGill University, Montreal, Canada

55 HEXOSAMINIDASES IN HUMAN BRAIN & TUMORS OF THE NERVOUS SYSTEM
R.B. Ramsey, Dept. of Neurology, Saint Louis University, MO, USA

56 TRYPTOPHAN METABOLISM IN METABOLIC ENCEPHALOPATHIES: POST MORTEM HUMAN BRAIN ANALYSIS
P. Riederer and **K. Jellinger,** Ludwig Boltzmann Institute of Clinical Neurobiology, Lainz-Hospital, Vienna, Austria

57 ABNORMAL HIGH DENSITY LIPOPROTEINS METABOLISM IN CEREBROTENDINOUS XANTHOMATOSIS
S. Shefer*, G. Salen, F.W. Cheng, V.G. Shore and **T.M. Forte,**
*College of Medicine & Dentistry of NJ, NJMS, Newark and Lawrence Livermore Lab., University of California, USA

58 OPPOSITE PATTERNS OF CATECHOLAMINE DISCHARGE DURING EMOTIONAL STRESS IN CEREBRAL HEMORRHAGE AND CEREBRAL INFARCT PATIENTS
E. Stoica and **O. Enulescu,** Institute of Neurology and Psychiatry, Bucharest, Romania

59 MUSCLE PROTEIN AND RNA TURNOVER IN DUCHENNE MUSCULAR DYSTROPHY
J.K. Tomkins, S. Collins and **A.D. Kidman,** Neurobiology Unit, School of Life Sciences, N.S.W. Institute of Technology, Gore Hill, Australia

60 POSSIBLE LINK BETWEEN INOSINETRIPHOSPHATE PYROPHOSPHOHYDROLASE DEFICIENCY IN BRAIN AND PARANOID SCHIZOPHRENIA
B.S. Vanderheiden, Eastern Pennsylvania Psychiatric Institute, Philadelphia, USA

POSTER PRESENTATIONS P5 (Continued)

Poster No.

61 SECTION OF FORNIX IN ANIMALS WITH HYPOTHALAMIC COBALT EPILEPTOGENIC FOCUS. LEVEL OF CEREBRAL AMINO ACIDS AND CORRELATIONS WITH EEG AND BEHAVIOURAL DATA
V. Voiculescu, N. Luca, S. Sirian and **J. Ungher,** Institute of Neurology and Psychiatry, Bucharest, Rumania

62 BLOOD LEVELS OF SEROTONIN AND CERULOPLASMIN OVER THE INTERICTAL PERIOD IN EPILEPTICS BEFORE AND DURING TREATMENT WITH PHB OR DPH
D. Volanschi, N. Luca, D. Hategan and **G. Ionescu,** Institute of Neurology and Psychiatry, Bucharest, Romania

44 EFFECTS OF ELECTROCONVULSIONS (ECS) AND GAMMA-AMINO-BETA-HYDROXYBUTYRIC ACID (GABOB) ON GABA SHUNT ENZYME ACTIVITY
V. Vukadinovic and **Lj. Rakic,** Brain Research Lab., Kotor, Yugoslavia

63 STROKE AND ATHEROSCLEROSIS: POSSIBLE ROLE OF CHOLESTEROLESTER HYDROLASE (CEH) DEFICIENCY: FURTHER CLUES FROM MONONUCLEAR CELL CEH ACTIVITY
F.M. Yatsu, F. Hagemenas and **L. Manaugh,** Dept. of Neurology and the Comprehensive Stroke Center of Oregon, University of Oregon Health Sciences Center, Portland, USA

64 THE MECHANISM OF ANTI-PARKINSONIAN ACTION OF DEPRENYL
M.B.H. Youdim, P. Riederer and **W. Birkmayer,** Technion, Faculty of Medicine, Haifa, Israel and Ludwig Boltzmann Institute for Neurobiology, Vienna, Austria

TUESDAY, SEPTEMBER 4, 1979

13.30—15.00 **Lobby/Garden**

POSTER PRESENTATIONS P6

BIOCHEMISTRY OF PROTEINS IN THE NERVOUS SYSTEM

Please see the General Information section regarding the display of posters

Poster No.

65 EXOCYTOSIS AND CONTRACTILE PROTEINS IN ADRENAL MEDULLA
D. Aunis and **G. Devilliers,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

66 UPTAKE OF β-ALANINE AND TAURINE BY NEURONS AND GLIA IN PRIMARY CULTURE
V.J. Balcar, Ciba-Geigy AG, Research Dept., Basel, Switzerland

67 INVESTIGATION OF THE PRESUMED OLIGOCLONAL IMMUNOGLOBULINS IN BRAIN
F. Bollengier and **A. Mahler,** Lab. voor Fysiopathologie van het Zenuwstelsel, Vrije Universiteit Brussel, Belgium

68 BIOSYNTHESIS OF FILAMENTOUS PROTEINS BY RABBIT SPINAL CORD: IN VIVO AND IN VITRO STUDIES
H.H. Czosnek, D. Soifer and **H.M. Wisniewski,** Institute for Basic Research in Mental Retardation, Staten Island, NY, USA

69 INTERSPECIES COMPARISONS OF NEUROFILAMENT PROTEINS
P.F. Davison, Boston Biomedical Research Institute, MA, USA

70 NUCLEAR BINDING SITES SPECIFIC FOR S-100 PROTEIN IN RAT BRAIN
R. Donato and **F. Michetti,** Dept. of Anatomy, Università Cattolica, Rome, Italy

71 POTENTIAL OF SPECIFIC PROTEIN PHOSPHORYLATION SYSTEMS TO SERVE AS A FUNCTIONAL ENTITY OF THE OPIATE-RECEPTOR COMPLEX
Y.H. Ehrlich, L.G. Davis, P. Keen and **E.G. Brunngraber,** Missouri Institute of Psychiatry, University of Missouri-Columbia, School of Medicine, St. Louis, USA

72 RIBOSOMAL PROPERTIES AND INTERACTION WITH MEMBRANES AFTER ETHANOL DEPENDENCE
E.W. Fleming and **S. Tewari,** University of California, Alcohol Research Center, Irvine, USA

POSTER PRESENTATIONS P6 (Continued)

Poster No.

74 IMMUNOCHEMICAL STUDIES ON TORPEDO ELECTROPLAX MEMBRANE ANTIGENS
C. Gerstenberg, J. Ramlau and **E. Bock,** The Protein Lab., University of Copenhagen, Denmark

75 EFFECT OF UNDERNUTRITION ON BRAIN PROTEIN METABOLISM
A.M. Giuffrida*, M. Banay-Schwartz, H. Sershen and **A. Lajtha,** Instituto di Chimica Biologica, Catania, Italy and Center for Neurochemistry, Ward's Island, NY, USA

76 EFFECT OF HYPERAMMONEMIA ON THE ACTIVITIES OF GUANINE-DEAMINASE AND ITS NATURAL INHIBITOR PROTEIN IN RAT BRAIN
S. Kumar, M. Rathi, L.-S. Soung and **T. Ing,** Perinatal Medicine, Christ Hospital, Oak Lawn and Dept. of Medicine, V.A. Medical Center, Hines, IL, USA

77 PROTEIN SYNTHESIS IN NERVE ENDINGS
P. Lähdesmäki, Dept. of Biochemistry, University of Oulu, Finland

78 PRIMARY STRUCTURE ANALYSIS OF WHITE MATTER PROTEOLIPID: USE OF ELASTASE
M.B. Lees and **W.B. Macklin,** E.K. Shriver Center, Waltham, MA, USA

79 NMR STUDIES OF AN ENCEPHALITOGENIC PEPTIDE
S.A. Margetson, G. Khanarian, W.J. Moore, P. Mack and **S.J. Pasaribu,** School of Chemistry, University of Sydney, N.S.W., Australia

80 HIGH-AFFINITY BINDING OF β-ALANINE TO SYNAPTOSOME-ENRICHED FRACTIONS OF RAT CNS REGIONS; EFFECTS OF ANTAGONISTS
L.M. Orensanz, Depto. Investigación Centro "Ramón y Cajal", Madrid, Spain

73 ETHANOL INDUCED CHANGES IN THE PROPERTIES OF BRAIN RIBOSOMES
S. Tewari and **E.P. Noble,** Dept. of Psychiatry and Human Behavior, Alcohol Research Center, University of California, Irvine, USA

81 TOPOGRAPHIC DISTRIBUTION AND IMMUNOLOGICAL IDENTITY OF BRAIN SPECIFIC PROTEIN α ALBUMIN (GFA)
M. Noppe, A. Lowenthal, D. Karcher and **J. Gheuens,** Dept. of Neurochemistry, Born Bunge Stichting, Universitaire Instelling Antwerpen, Antwerp, Belgium

82 IMMUNOCHEMICAL AND IMMUNOCYTOCHEMICAL STUDY OF BRAIN SPECIFIC PROTEIN α-ALBUMIN (GFA) IN ISOLATED ASTROCYTES
J. Gheuens, M. Noppe, D. Karcher and **A. Lowenthal,** Dept. of Neurochemistry, Born Bunge Stichting, Universitaire Instelling Antwerpen, Antwerp, Belgium

TUESDAY, SEPTEMBER 4, 1979

15.00—17.30 **Hall B**

SYMPOSIUM/WORKSHOP — SW4

BIOCHEMISTRY OF THE CHOLINERGIC NERVE ENDING

Chairmen: **H. Zimmermann,** West Germany
M.J. Dowdall, UK

15.00 BIOCHEMICAL CHARACTERIZATION OF THE CHOLINERGIC PRESYNAPTIC MEMBRANE
M.J. Dowdall, Dept. of Biochemistry, University of Nottingham Medical School, Queen's Medical Centre, UK

15.25 CHARACTERIZATION OF MEMBRANE PROTEINS OF THE CHOLINERGIC SYNAPSE
H. Stadler and **J.H. Walker,** Neurochemistry Dept., Max-Planck-Institut für Biophysikalische Chemie, Göttingen, West Germany

15.50 EFFECT OF La^{3+} -IONS ON ACh RELEASE IN STRIATED MUSCLE
R. Miledi, P.C. Molenaar and **R.L. Polak,** Dept. of Biophysics, University College London, UK; Dept. of Pharmacology, Leiden and Medical Biological Laboratory, Rijswijk, The Netherlands

16.15 PRESYNAPTIC CHANGES IN LIPID METABOLISM MEDIATED VIA THE MUSCARINIC RECEPTOR
M.R. Pickard and **J.N. Hawthorne,** Biochemistry Dept., Medical School, Queen's Medical Centre, Nottingham, UK

16.40 EVIDENCE FOR THE ROLE OF CALCIUM AND CALMODULIN-DEPENDENT PROTEIN PHOSPHORYLATION IN CHOLINERGIC RELEASE MECHANISMS
R.J. DeLorenzo, Dept. of Neurology, Yale Medical School, New Haven, CT, USA

17.05 TORPEDO SYNAPTOSOMES: EVIDENCE FOR CALCIUM DEPENDENT DEPOLARIZATION-INDUCED PROTEIN PHOSPHORYLATION
D.M. Michaelson and **S. Avisar,** Dept. of Biochemistry, Tel Aviv University, Ramat Aviv, Israel

17.30 GENERAL DISCUSSION

TUESDAY, SEPTEMBER 4, 1979

15.00—17.30 **Hall F**

SYMPOSIUM/WORKSHOP — SW5

GLUTAMATE AND THE CENTRAL NERVOUS SYSTEM

Organized by: **P.J. Roberts, J. Storm-Mathisen** and **G.A.R. Johnston**

Chairmen: **G.A.R. Johnston**, Australia
P.J. Roberts, UK

15.00 PHARMACOLOGY OF EXCITATORY AMINO ACID RECEPTORS IN THE VERTEBRATE CENTRAL NERVOUS SYSTEM
J.C. Watkins, Dept. of Physiology, The Medical School, Bristol, UK

15.30 IDENTIFICATION OF RECEPTORS FOR L-GLUTAMATE BY IN VITRO BINDING STUDIES
P.J. Roberts, Dept. of Physiology & Pharmacology, School of Biochemical & Physiological Sciences, University of Southampton, UK

15.50 EXCITOTOXIC AMINO ACIDS AS TOOLS IN NEUROBIOLOGY
P.L. McGeer and **E.G. McGeer,** University of British Columbia, Kinsmen Laboratory of Neurological Research, Vancouver, Canada

16.20 AUTORADIOGRAPHIC AND MICROCHEMICAL LOCALIZATION OF HIGH AFFINITY UPTAKE OF GLUTAMATE AND ASPARTATE
J. Storm-Mathisen, N. Blackett, F. Fonnum, L.L. Iversen, M.W. Opsahl, T. Taxt, J.E. Wold, Anatomical Institute, University of Oslo, Norway

16.40 GLUTAMATE AS A HIPPOCAMPAL TRANSMITTER
C.W. Cotman, Dept. of Psychobiology, University of California, Irvine, USA

17.10 GLUTAMERGIC NEURONS; LOCALIZATION, RELEASE AND METABOLISM
D. Malthe-Sørenssen, K. Skrede and **I. Walaas,** Norwegian Defence Research Establishment, Division for Toxicology, Kjeller, Norway

TUESDAY, SEPTEMBER 4, 1979

15.00—17.30 **Hall D**

SYMPOSIUM/WORKSHOP — SW6

MYELIN-ASSOCIATED ENZYME ACTIVITIES

Chairmen: **K. Suzuki,** USA
W.T. Norton, USA
Y. Tsukada, Japan

Participants will engage in a free-flowing discussion for the duration of the session

ACTIVITY OF 5'-NUCLEOTIDASE IN ISOLATED MYELIN
W. Cammer, S. Sirota and **W.T. Norton,** Albert Einstein, College of Medicine, Bronx, NY, USA

UDP-GALACTOSE: CERAMIDE GALACTOSYLTRANSFERASE IN PURIFIED MYELIN
E. Costantino-Ceccarini, K. Suzuki, A. Cestelli and **G.H. DeVries*,** Albert Einstein College of Medicine, Bronx, NY, USA and *Medical College of Virginia, Richmond, USA

STUDIES ON UDP-GALACTOSE: CERAMIDE GALACTOSYL TRANSFERASE IN MYELIN
F.B. Jungalwala and **O. Koul,** E.K. Shriver Center for Mental Retardation, Waltham and Harvard Medical School, Boston, MA, USA

EVIDENCE FOR PRESENCE OF CDP-CHOLINE: 1,2-DYRADYL-SN-GLYCEROL CHOLINE PHOSPHOTRANSFERASE IN RATS CNS MYELIN
R.W. Ledeen and **P.S. Wu,** Depts. of Neurology and Biochemistry, Albert Einstein College of Medicine, Bronx, NY, USA

IS $Na^+ + K^+$ATPase A MYELIN-ASSOCIATED ENZYME?
D.S. Reiss, M.B. Lees and **V.S. Sapirstein,** The E.K. Shriver Center for Mental Retardation, Waltham and Harvard Medical School, Boston, MA, USA

CARBONIC ANHYDRASE IN OLIGODENDROCYTES AND MYELIN
P. Mandel, J.P. Delaunoy and **G. Roussel,** Centre de Neurochimie, CNRS, Strasbourg, France

WEDNESDAY, SEPTEMBER 5, 1979

08.30—12.30 **Hall B**

SYMPOSIUM — S3

FUNCTION OF ALPHA- AND BETA-ADRENORECEPTORS

Organized by: **L. Iversen,** UK
A. Levitzki, Israel

Chairman: **Y. Gutman,** Israel

08.30 MOLECULAR PROPERTIES OF ALPHA AND BETA-ADRENERGIC RECEPTORS
R.J. Lefkowitz, Duke University Medical Center, Durham, NC, USA

09.00 A PROPOSAL FOR 3 CLASSES OF AGONISTS FROM RELATIONS BETWEEN β-ADRENOCEPTOR OCCUPANCY AND POSITIVE INOTROPIC EFFECTS IN HEARTS FROM RESERPINE-PRETREATED KITTENS
A.J. Kaumann, Physiologisches Institut der Universität, Lehrstuhl für Klinische Physiologie, Düsseldorf, West Germany

09.30 THE LOCALIZATION OF α AND β ADRENERGIC RECEPTORS
D. Atlas, Dept. of Biological Chemistry, Hebrew University of Jerusalem, Israel

10.00 Coffee Break

10.30 INDEPENDENT REGULATION OF β-1 AND β-2-ADRENERGIC RECEPTORS IN RAT CEREBRAL CORTEX
P.B. Molinoff, K.P. Minneman, B.B. Wolfe, M.D. Dibner and **R.N. Pittman,** University of Colorado Medical Center, Denver, CO, USA

11.00 α_1 AND α_2 ADRENERGIC RECEPTOR LABELING IN RODENT CNS: SPECIES VARIATION AND EFFECT OF DISCRETE LESIONS
D.C. U'Prichard, Dept. of Pharmacology, Northwestern University School of Medicine, Chicago, IL, USA

11.30 BIOCHEMICAL EVENTS ASSOCIATED WITH STIMULUS-RESPONSE COUPLING AT α-ADRENERGIC RECEPTORS
R.H. Michell and **L.M. Jones,** Dept. of Biochemistry, University of Birmingham, UK

12.00 SIX STUDIES OF CARDIAC BETA-ADRENERGIC RECEPTORS
S.P. Baker and **L.T. Potter,** University of Miami, FL, USA

WEDNESDAY, SEPTEMBER 5, 1979

08.30—12.30 **Hall A**

SYMPOSIUM — S4

INTRACELLULAR MOTILITY

Organized by: **G.W. Kreutzberg,** West Germany

Chairmen: **G.W. Kreutzberg,** West Germany
P.C. Marchisio, Italy

08.30 INTRODUCTION

08.40 DISTRIBUTION OF CONTRACTILE STRUCTURES IN NERVE CELLS AND THE EFFECTS OF DRUGS
P.C. Marchisio, Dept. of Human Anatomy, University of Turin School of Medicine, Italy

09.00 RELATIONSHIP BETWEEN SURFACE MOBILITY AND CYTOSKELETON ORGANIZATION IN NEUROBLASTOMA CELLS
G. Isenberg, J.V. Small and **G.W. Kreutzberg,** Max-Planck-Institut für Psychiatrie, München, West Germany

09.20 LOCALIZATION OF CONTRACTILE AND STRUCTURAL PROTEINS IN NEURONS OF MARINE MOLLUSC, APLYSIA
J.H. Schwartz, B.W. Lubit and **D.J. Goldberg,** College of Physicians and Surgeons of Columbia University, NY, USA

09.40 SLOWLY MIGRATING AXONAL POLYPEPTIDES. INEQUALITIES IN THEIR AMOUNT AND RATE OF TRANSPORT IN TWO BRANCHES OF BIFURCATING AXONS
H. Mori, Y. Komiya and **M. Kurokawa,** Dept. of Biochemistry, Institute of Brain Research, Tokyo University Faculty of Medicine, Japan

10.00 Coffee Break

10.30 CONTRACTILE PROCESSES IN AXONAL GROWTH
D. Bray and **G. Shaw,** MRC Cell Biophysics Unit, London, UK

10.50 THE TROPONIN COMPLEX ISOLATED FROM BOVINE BRAIN
S. Berl and **C. Mahendran,** Mount Sinai School of Medicine, NY, USA

11.10 DISTRIBUTION AND ROLE OF STRUCTURAL PROTEINS IN DEVELOPING NERVE AND MUSCLE CELLS
H. Jockusch and **B.M. Jockusch,** Institute of Neurobiology, University of Heidelberg and European Molecular Biology Lab., Heidelberg, West Germany

11.30 IN VITRO STUDIES ON THE INTERACTION OF NERVE GROWTH FACTOR (NGF) WITH BRAIN ACTIN
P. Calissano, D. Mercanti, L. Castellani and **G. Monaco,** Lab. of Cell Biology, CNR, Rome, Italy

11.50 GENERAL DISCUSSION

WEDNESDAY, SEPTEMBER 5, 1979

08.30—12.30 **Hall C**

ORAL COMMUNICATION SESSION — OC9

BIOCHEMISTRY OF NEUROTRANSMITTERS II

Chairman: **M.H. Aprison,** USA

08.30 A SENSITIVE FLUOROMETRIC ASSAY FOR 2',3'-CYCLIC NUCLEOTIDE PHOSPHOHYDROLASE (CNP)
S. Weissbarth, G.M. Lehrer, H.S. Maker and **S. Schneider,**
Dept. of Neurology, Mt. Sinai School of Medicine, CUNY, NY
and the Veterans Administration Hospital, Bronx, NY and
M.B. Bornstein, Albert Einstein College of Medicine, Bronx, NY, USA

08.45 PRESYNAPTIC INCREASE OF CYCLIC AMP BY ADENOSINE DERIVATIVES: FEED-BACK REGULATORY ROLE OF ADENOSINE (ATP) IN NEUROTRANSMISSION
Y. Kuroda and **K. Kobayashi,** Dept. of Neurochemistry,
Tokyo Metropolitan Institute for Neurosciences, Japan

09.00 PURIFICATION OF A CALMODULIN DEPENDENT CYCLIC AMP PHOSPHODIESTERASE FROM MAMMALIAN NERVE
Z. Iqbal, Dept. of Physiology and Medical Biophysics Program,
Indiana University School of Medicine, Indianapolis, USA

09.15 CHOLECYSTOKININ OCTAPEPTIDE: VESICULAR LOCALIZATION AND CALCIUM DEPENDENT RELEASE FROM RAT BRAIN IN VITRO
P.C. Emson, C.M. Lee and **J.F. Rehfeld*,** MRC Neurochemical Pharmacology Unit,
Dept. of Pharmacology, Medical School, Cambridge, UK and
*Institute of Medical Biochemistry, University of Aarhus, Denmark

09.30 IN VIVO BIOSYNTHESIS OF CHOLECYSTOKININ IN RAT CEREBRAL CORTEX
N. Goltermann and **J.F. Rehfeld,** Institute of Medical Biochemistry,
University of Aarhus, Denmark

09.45 ANGIOTENSIN CONVERTING ENZYME IN STRIATAL TISSUE
E.G. McGeer and **E.A. Singh,** Kinsmen Lab. of Neurological Research,
University of British Columbia, Vancouver, Canada

10.00 Coffee Break

OC9 — BIOCHEMISTRY OF NEUROTRANSMITTERS II (Continued)

10.30 CNS NEUROTRANSMITTERS AND PYRIDOXINE
K. Dakshinamurti, Dept. of Biochemistry, Faculty of Medicine, University of Manitoba, Winnepeg, Canada

10.45 COMPARATIVE NEUROEXCITATORY CHOLINERGIC AND GABAERGIC LOCAL MECHANISMS IN THE CAUDATE AND HIPPOCAMPUS
W.W. Baker and **M. Kratky,** Philadelphia College of Osteopathic Medicine and Eastern Pennsylvania Psychiatric Institute, Philadelphia, PA, USA

11.00 LOCALIZATION OF GABA-ERGIC NEURONS IN THE EXTRAPYRAMIDAL TRACT: ANALYSIS USING INTRACEREBRAL MICROINJECTION OF KAINIC ACID
K. Kuriyama, E. Kurihara and **Y. Yoneda,** Dept. of Pharmacology, Kyoto Prefectural University of Medicine, Japan

11.15 IONIC DEPENDENCY OF LH-RH AND SRIF RELEASE FROM RAT MBH IN VITRO
S.V. Drouva, J. Epelbaum, M. Hery, E. Laplante and **C. Kordon,** Unité 159 de Neuroendocrinologie, Centre Paul Broca de l'INSERM, Paris, France

11.30 EFFECT OF VALPROATE AND MUSCIMOL ON AGGRESSIVE BEHAVIOR BY ISOLATION
S. Puglisi-Allegra, A. Oliverio, E. Kempf, G. Mack and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

WEDNESDAY, SEPTEMBER 5, 1979

08.30—12.30 **Hall D**

ORAL COMMUNICATIONS SESSION — OC10

LIPIDS OF THE NERVOUS SYSTEM

Chairman: **N.A. Baumann,** France

08.30 INHIBITION OF SOMAL LIPID SYNTHESIS DEPRESSES INITIATION OF FAST AXONAL TRANSPORT
F.M. Longo and **R. Hammerschlag,** Division of Neurosciences, City of Hope Medical Center, Duarte, CA, USA

08.45 GLYCOLIPIDS OF FROG NERVE TISSUES
Y. Tamai, S. Saito*, H. Kojima and **M. Ohashi**,** Dept. of Biochemistry, Kitasato Univ. School of Medicine, Sagamihara 228, *Musashi National Institute of Mental and Nervous Disease, Tokyo and **Ochanomizu University, Tokyo, Japan

09.00 THE CONTRIBUTION OF CERAMIDE/LIPID INTERACTIONS & THE UDP-GALACTOSE: CERAMIDE GALACTOSYLTRANSFERASE ACTIVITY
H. Reiber, Neurochem. Labor. der Neurol. Klinik, Göttingen, West Germany

09.15 ENHANCEMENT OF THE BINDING OF SEROTONIN TO SEROTONIN BINDING PROTEIN (SBP) BY GANGLIOSIDES
H. Tamir, W. Brunner, D. Casper and **M. Rapport,** Division of Neuroscience, New York State Psychiatric Institute and Columbia University, College of Physicians and Surgeons, NY, USA

09.30 THE SPECIFICITY OF N-ACETYL-B-D-HEXOSAMINIDASES ON GLYCOSPHINGOLIPIDS
K. Sandhoff and **E. Conzelmann,** Max-Planck-Institut für Psychiatrie, Münich, West Germany

09.45 PHOSPHATIDYL GLYCEROL FORMATION BY RAT BRAIN
J.N. Kanfer, University of Manitoba, Dept. of Biochemistry, Faculty of Medicine, Winnipeg, Canada

10.00 Coffee Break

OC10 — LIPIDS OF THE NERVOUS SYSTEM (Continued)

10.30 BIOSYNTHESIS AND SUBCELLULAR DISTRIBUTION OF DISATURATED PHOSPHATIDYLCHOLINE IN RAT BRAIN
L. Freysz* and **H. Van den Bosch,** Laboratory of Biochemistry, Utrecht, The Netherlands and *Centre de Neurochimie du CNRS, Strasbourg Cedex, France

10.45 EFFECT OF EXOGENOUSLY ADDED GANGLIOSIDE GM_1 ON THE (Na^+-K+) ATPase OF RAT BRAIN NEURONAL MEMBRANE
A. Leon, L. Facci, A.C. Bonetti and **G. Toffano,** Fidia Research Labs., Abano Terme, Italy

11.00 PROBABLE ROLE OF EXOGENOUS GANGLIOSIDES ON INNER EAR MECHANISMS
G. Molinari*, F. Aporti and **L. Tredese,** *Dept. of Audiology, University of Padova and Fidia Research Labs., Abano Terme, Italy

11.15 LEVELS OF $PGF_{2\alpha}$, TXB_2, HETE, OF ENERGY METABOLITES AND cAMP IN GERBIL BRAIN AFTER LIGATION OF COMMON CAROTID ARTERIES AND DECAPITATION
C. Galli, C. Spagnuolo, L. Sautebin, G. Galli, G. Racagni, S. Mazzari* and **M. Finesso*,** Institute of Pharmacology and Pharmacognosy, University of Milan and *Fidia Research Labs., Abano Terme, Italy

11.30 THE EFFECTS OF HYPOXIC-HYPOXIA ON PHOSPHOLIPIDS IN BRAIN SUBCELLULAR MEMBRANES
J. Strosznajder, *Dept. of Neurochemistry, Medical Research Centre,* Polish Academy of Sciences, Warsaw

11.45 INCREASED CALCIUM-ACTIVATED PHOSPHOLIPASE A_2 ACTIVITY IN RAT SYNAPTOSOMES DURING POST-DECAPITATIVE ISCHEMIA
J. Strosznajder, W. Tang* and **G.Y. Sun*,** Dept. of Neurochemistry, Medical Research Centre, Warsaw, Poland and *Sinclair Research Farm and Biochemistry Dept., University of Missouri, Columbia, USA

12.00 THE ACYL GROUP COMPOSITION OF PHOSPHOGLYCERIDES IN RAT SYNAPTOSOMES: EFFECT OF ISCHEMIA AND HYPOXIA
G.Y. Sun, R. Manning and **J. Strosznajder,** Sinclair Research Farm and Biochemistry Dept., University of Missouri, Columbia, USA

WEDNESDAY, SEPTEMBER 5, 1979

08.30—12.30 **Hall F**

ORAL COMMUNICATIONS SESSION — OC11

AMINO ACIDS AND PROTEINS IN THE NERVOUS SYSTEM

Chairman: **C.F. Baxter,** USA

08.30 IMMUNO-NEPHELOMETRIC (I-NEPH) DETERMINATION OF CSF-AND SERUM PROTEINS IN NEUROLOGICAL DISEASES — A VALUABLE COMPLEMENTARY EXAMINATION TO HIGH-SEPARATING PROTEIN ANALYSES
K.G. Kjellin, Dept. of Neurology, Karolinska Hospital, Stockholm, Sweden

08.45 A MACROPHAGE-SPECIFIC ANTIGEN PRESENT IN REACTIVE BRAIN MACROPHAGES
L. Rönnbäck and **L.I. Persson,** Dept. of Neurology and Institute of Neurobiology, University of Göteborg, Sweden

09.00 CHARACTERISATION OF PRESYNAPTIC PROTEINS IN RETINAL GANGLION CELLS
J.-O. Karlsson, Institute of Neurobiology, University of Göteborg, Sweden

09.15 PURIFICATION OF AN ACTH-SENSITIVE RAT BRAIN MEMBRANE PHOSPHOPROTEIN
H. Zwiers, Th. van den Heuvel, V.M. Wiegant, A.B. Oestreicher, P. Schotman and **W.H. Gispen,** Div. of Molecular Neurobiology, Rudolf Magnus Institute, Lab. of Physiological Chemistry, Institute of Molecular Biology, University of Utrecht, The Netherlands

09.30 PEPTIDE ANALYSIS OF INTERMEDIATE FILAMENT PROTEINS
F.-C. Chiu, B. Korey, J.E. Goldman and **W.T. Norton,** Albert Einstein College of Medicine, Bronx, NY, USA

09.45 THE NATURE OF THE AMINO ACID POOL USED FOR PROTEIN SYNTHESIS IN RAT BRAIN SLICES
M.E.A. Reith, P. Schotman* and **W.H. Gispen***, Center for Neurochemistry, Ward's Island, NY, USA and *Division of Molecular Biology, Utrecht, The Netherlands

10.00 Coffee Break

OC11 — AMINO ACIDS AND PROTEINS IN THE NERVOUS SYSTEM (Continued)

10.30 EFFECTS OF INSULIN ON ENZYMES INVOLVED IN PHENYLALANINE AND TYROSINE METABOLISM OF RATS
M. Kohsaka, M. Okita and **T. Shohmori,** Institute for Neurobiology, Okayama University Medical School, Japan

10.45 EFFECTS OF ORAL TYROSINE ADMINISTRATION ON PLASMA TYROSINE LEVELS IN NORMAL HUMAN SUBJECTS
J.H. Growdon, Tufts-New England Medical Center, Boston, MA, USA and **E. Melamed, B. Glaeser, R.J. Wurtman,** M.I.T., Cambridge, MA, USA

11.00 THE EFFECT OF AN ALTERED PLASMA OSMOLALITY UPON BEHAVIOR AND CELLULAR LEVELS OF AMINO ACIDS IN NERVOUS SYSTEM
C.F. Baxter, R.A. Baldwin, K.H. Tachiki, B.B. Rose and **J.W. Dole,** Neurochemistry Labs. V.A. Medical Center, Sepulveda, CA, USA

11.15 CEREBRAL UPTAKE OF AMINO ACIDS IN HUMAN SUBJECTS IN VIVO
W. Sacks, R.V. Coxon and **S. Sacks,** New York State Rockland Research Institute, Orangeburg, USA

11.30 REGULATION OF PLASMA AMINO ACID CONCENTRATIONS BY THE AUTONOMIC NERVOUS SYSTEM
H. Kishimoto, Y. Hama, Y. Iijima, Y. Yamamoto, Y. Kitamura, T. Mizuno and **S. Yokoi,** Dept. Neurology and Psychology, Yokohama University, Japan

11.45 CONCENTRATION CHANGES OF GABA, GLUTAMIC AND OTHER AMINO ACIDS IN THE STRIATUM AFTER FRONTAL CORTEX ABLATION AND MORPHINE ADMINISTRATION IN RATS
R. Hassler, P. Haug, J.S. Kim, C. Nitsch, K.S. Paik, Max-Planck-Institut für Hirnforschung, Frankfurt/Main, West Germany

WEDNESDAY, SEPTEMBER 5, 1979

13.30—14.45 **Lobby/Garden**

POSTER PRESENTATIONS P7

NEUROCHEMISTRY OF GROWTH, DEVELOPMENT AND AGEING

Please see the General Information section regarding the display of posters

Poster No.

1 DECREASED NERVE GROWTH FACTOR (NGF) CONCENTRATION IN SUBMAXILLARY GLANDS (SMG) AND HEAT OF DYSTROPHIC (dy/dy) MICE
A. Aharonov, R. Goodman, P. Walker, M.E. Weichsel, Jr. and **H.R. Herschman,** Lab. of Nuclear Medicine, UCLA, CA, USA

3 TRANSPORT OF PURINES, PYRIMIDINES, AND THEIR NUCLEOSIDES INTO MOUSE BRAIN SLICES
M. Banay-Schwartz, T. DeGuzman and **A. Lajtha,** Center for Neurochemistry, Ward's Island, NY, USA

4 MOUSE GLIAL CELLS IN PRIMARY CULTURE EFFECT OF DBcAMP AND PGE_1, ON GABA AND GLUTAMATE METABOLISM IN ASTROCYTES. ACTION ON cGMP CONTENT
M. Bloch-Tardy, J. Bardakdjian, C. Fages and **P. Gonnard,** Dept. de Biochimie, C.H.U. Henri-Mondor, Creteil, France

5 NEUROPEPTIDES AND BRAIN DEVELOPMENT
G.J. Boer, D.F. Swaab and **H.B.M. Uylings,** Netherlands Institute for Brain Research, Amsterdam

6 CELL FORMATION AND DEATH IN THE NON-AFFERENTED CHICK OPTIC LOBE
S.C. Bondy, National Institute of Environmental Health Sciences, Lab. of Behavioral and Neurological Toxicology, NC, USA

7 EFFECT OF BRAIN EXTRACTS ON MEMBRANE ENZYME ACTIVITIES IN CULTURED NERVE CELLS FROM CHICK EMBRYO BRAIN
Y. Cam, M. Ledig, M. Sensenbrenner and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

8 PHOTOAFFINITY LABELING OF SEROTONIN BINDING PROTEINS DECREASED IN AGED HUMAN BRAINS
S.C. Cheng and **J.C. Shih,** School of Pharmacy, University of Southern California, Los Angeles, USA

POSTER PRESENTATIONS P7 (Continued)

Poster No.

9 ACETYLCHOLINESTERASE MOLECULAR FORMS: PRE AND POSTSYNAPTIC DISTRIBUTION IN CHICKEN CILIARY GANGLION
J.Y. Couraud, H.L. Koenig and **L. Di Giamberardino,** Dépt. de Biologie, C.E.N. de Saclay, Gif-sur-Yvette and Lab. de Cytologie, Université Paris, France

10 EXCESS DNA IN THE SUBESOPHAGEAL DIVISION OF OCTOPUS BRAIN
B. De Marianis, E. Olmo and **A. Giuditta,** Intern. Inst. Genet. Bioph., Inst. Histol., Faculty of Science and Zoological Station, Naples, Italy

11 ENZYMATIC SYNTHESIS OF GANGLIOSIDES BY SIALYTRANSFERASES DURING THE MATURATION OF NEURONS IN CULTURE DEVOID OF GLIAL CELLS
H. Dreyfus, S. Harth, J.C. Louis, A. Wolf, A.N.K. Yusufi and **P. Mandel,** Unité 44 de l'INSERM, and Centre de Neurochimie du CNRS, Strasbourg Cedex, France

12 CHOLINERGIC NEUROTRANSMISSION DEVELOPMENT DURING ONTOGENESIS IN THE CHICK EMBRYO CENTRAL NERVOUS SYSTEM
A. Ebel, G. Thiriet, T. Durkin, G. Devilliers and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

13 NEONATAL HYPOTHYROIDISM AND EARLY UNDERNUTRITION IN THE RAT. DEFFECTIVE MEMBRANOGENESIS IN THE CNS
I. Faryna de Raveglia, J.M. Pasquini, N. Capitman and **E.F. Soto,** Depto. de Química Biológica, Facultad Farmacia y Bioquímica, Universidad de Buenos Aires, Argentina

14 BIOCHEMICAL CHARACTERISTICS OF BULK ISOLATED OLIGODENDROGLIA FROM PIG BRAIN OF DIFFERENT AGES
P.J. Gebicke-Härter, H.H. Althaus, N. Benatar and **V. Neuhoff,** Max-Planck-Institut für experimentelle Medizin, Forschungsstelle Neurochemie, Göttingen, West Germany

15 EFFECTS OF NEONATAL UNDERNUTRITION UPON NUCLEOCYTOPLASMIC TRANSPORT OF RNA AND ON PROTEIN SYNTHESIS IN DEVELOPING RAT BRAIN
C.J Gómez, B.H. Duvilanski and **A.E. Ramírez de Guglielmone,** Dpto. de Química Biológica, Facultad de Farmacia y Bioquímica, Universidad de Buenos Aires, Argentina

2 TYROSINE HYDROXYLASE INDUCTION IN RESPONSE TO PROTEIN AND STEROID FACTORS IN CLONAL CELL LINES
R. Goodman and **H.R. Herschman,** Lab. of Nuclear Medicine and Radiation Biology, UCLA, CA, USA

POSTER PRESENTATIONS P7 (Continued)

Poster No.

16 SENSITIVITY OF BRAIN PROTEIN SYNTHESIS TO HYPERTHERMIA INDUCED BY VARIOUS TREATMENTS
J. Heikkila, M. Freedman and **I.R. Brown,** Scarborough College, University of Toronto, West Hill, Ont., Canada

18 THE D2-PROTEIN: ULTRASTRUCTURAL LOCALIZATION AND A POSSIBLE ROLE IN SYNAPTOGENESIS
O.S. Jørgensen and **M. Møller*,** Psychochemistry Institute and *Anatomical Dept. B, University of Copenhagen, Denmark

19 COMPARATIVE CHANGES IN ISOZYMIC FORMS OF NEURON SPECIFIC ENOLASE (NSE) DURING BRAIN DEVELOPMENT AND IN VITRO DIFFERENTIATION OF NERVOUS CELL LINES
A. Keller and **H. Scarna,** Faculté de Médecine, Lyon,
L. Legault and **Y. Zeitoun,** Collége de France, Paris and
D. Lando and **M. Cousin,** Roussel UCLAF, Romainville, France

20 ASTROCYTES FROM ADULT RAT BRAIN SUPPORT SURVIVAL OF NGF-DEPENDENT AND NGF-INSENSITIVE NEURONS
R.M. Lindsay, Lab. of Neurobiology, National Institute of Medical Research, London, UK

21 MORPHOLOGICAL, ULTRASTRUCTURAL AND BIOCHEMICAL ACQUISITIONS DURING MATURATION OF ISOLATED NEURONS IN CULTURE
J.-C. Louis, B. Pettman, H. Dreyfus, S. Harth, M. Sensenbrenner and **P. Mandel,** U. 44 de l'INSERM and Centre de Neurochimie du CNRS, Strasbourg Cedex, France

22 INCREASE OF MONOAMINE CONTENTS IN NEOCORTEX OF MICROENCEPHALIC RAT INDUCED BY PRENATAL ADMINISTRATION OF CYTOSINE ARABINOSIDE
T. Matsutani, M. Tamaru, M. Nagayoshi and **Y. Tsukada*,** Dept. of Dev. Physiol., Institute for Comprehensive Medical Sciences, Fujita-Gakuen University, School of Medicine, Aichi and *Dept. of Physiology, Keio University, School of Medicine, Shinanomachi, Shinjuku, Tokyo, Japan

23 GANGLIOSIDES AS POSSIBLE RECEPTORS FOR NEURONAL GROWTH REGULATING FACTORS
J.I. Morgan and **W. Seifert,** Max-Planck-Institute, F. Miescher-Lab., Tübingen, West Germany

24 THE EFFECT OF COMMISSURAL DEAFFERENTATION ON THE GLUTAMATE CONTENT IN SINGLE LAYERS OF THE RABBIT HIPPOCAMPUS
C. Nitsch, C. Shimada*, J.-K. Kim and **Y. Okada*,** Dept. of Neurobiology, Max-Planck-Institut für Hirnforschung, Frankfurt, West Germany and *Dept. of Neurochemistry, Tokyo Metropolitan Institute for Neurosciences, Japan

POSTER PRESENTATIONS P7 (Continued)

Poster No.

25 A HISTOCHEMICAL STUDY ON THE EFFECT OF KAINIC ACID ON THE ACETYLCHOLINESTERASE AND ADENYLATE CYCLASE ACTIVITY IN THE RAT NEOSTRIATUM
P. Panula*, L. Rechardt* and **S. Kaakkola****, Dept. of Anatomy* and Dept. of Pharmacology**, *University of Helsinki, Finland*

26 OCCURENCE OF CARNITINE PALMITYLTRANSFERASE IN BRAIN SUBCELLULAR ORGANELLES DURING BRAIN DEVELOPMENT
M. Paturneau-Jouas, N. Baumann and **J.M. Bourre,** Lab. de Neurochimie, INSERM U 134, Hôpital de la Salpêtrière, Paris, France

27 PHOSPHOCHOLINE AND PHOSPHOETHANOLAMINE TRANSFERASE IN GRAY MATTER AND WHITE DURING DEVELOPMENT OF RAT BRAIN
T.S. Reddy and **L.A. Horrocks,** Dept. of Physiological Chemistry, Ohio State University, Columbus, USA

28 GLYCOPROTEINS RELEASED BY CLONAL PC12 PHEOCHROMOCYTOMA CELLS AND CULTURED RAT SYMPATHETIC NEURONS
C. Richter-Landsberg, L.A. Greene and **M.L. Shelanski,** Dept. of Pharmacology, New York University Medical Center, NY, USA

29 THE ROLE OF ORNITHINE DECARBOXYLASE IN NEURONAL REGENERATION IN OLFACTORY EPITHELIUM
S. Rochel and **F.L. Margolis,** Dept. of Physiological Chemistry and Pharmacology, Roche Institute of Molecular Biology, Nutley, NJ, USA

30 SPECIFIC PROTEIN CHANGES IN YOUNG AND OLD RATS DURING ACQUISITION
L. Rönnbäck and **H. Hydén,** Institute of Neurobiology, University of Göteborg, Sweden

31 ADENYL CYCLASE AND PHOSPHODIESTERASE ACTIVITIES DURING FETAL DEVELOPMENT
M. Salinas, A. Galan and **P. Jorge,** Dpto. de Investigación, Servicio de Bioquímica, Centro Ramon y Cajal, Madrid, Spain

32 ISOLATION AND CHARACTERIZATION OF CELL POPULATIONS OF EARLY POSTNATAL MOUSE CEREBELLAR CORTEX IN VITRO
J. Schnitzer and **M. Schachner,** Dept. of Neurobiology, Heidelberg University, West Germany

POSTER PRESENTATIONS P7 (Continued)

Poster No.

33 DEVELOPMENTAL ASPECTS OF γ-GLUTAMYL TRANSPEPTIDASE IN CULTURED NEURONS AND GLIA
H.D. Shine, I. Oka, S. Petersen, L. Hertz and **B. Haber,** Marine Biomedical Institute, University of Texas Medical Br., Galveston, USA and University of Saskatchewan, Canada

34 MOLECULAR FORMS AND ULTRASTRUCTURAL LOCALIZATION OF AChE AND BuChE IN DEVELOPING DIAPHRAGM OF RAT
I. Sketelj and **M. Brzin,** Institute of Pathophysiology, School of Medicine, Ljubljana, Yugoslavia

36 CHANGES OF CELL SURFACE GLYCOCONJUGATES IN CLONAL LINES OF NERVE CELLS DURING DIFFERENTIATION IN CULTURE
I. Spector* and **B. Sela****, Depts. of Neurobiology* and Biophysics**, The Weizmann Institute of Science, Rehovot, Israel

37 [^{35}S] TAURINE ACCUMULATION IN THE NEONATAL RHESUS MONKEY BRAIN
J.A. Sturman, D.K. Rassin, G.E. Gaull and **L.J. Cote,** Depts. of Path. Neurobiology, Human Development and Nutrition, Institute for Basic Research in Mental Retardation, Staten Island and Dept. of Neurology, Columbia University, NY, USA

38 NEUROCHEMICAL CHANGES ASSOCIATED WITH AGEING IN AUTOIMMUNE MICE
L.C. Tang, Sloan-Kettering Institute for Cancer Research, NY, USA

39 REGIONAL DISTRIBUTION OF PERCHLORIC ACID SOLUBLE PROTEINS IN RAT BRAIN DURING DEVELOPMENT
E. Wedege and **R. Lund Karlsen,** Neurochemical Lab., The Oslo University Psychiatric Clinic, Vinderen, Norway

40 THE DEVELOPMENT OF β-ADRENERGIC RESPONSIVENESS IN CNS MOUSE REAGGREGATE CULTURES
J.M. Wehner and **J.R. Sheppard,** University of Minnesota, Dight Institute for Human Genetics, Minneapolis, USA

41 PRESYNAPTIC ALPHA-ADRENOCEPTORS IN THE RAT BRAIN: AN ONTOGENETIC STUDY
J. Wemer and **A.H. Mulder,** Dept. of Pharmacology, Free University Medical Faculty, Amsterdam, The Netherlands

POSTER PRESENTATIONS P7 (Continued)

Poster No.

42 NERVE GROWTH FACTOR (NGF) INDUCED MORPHOLOGICAL DIFFERENTIATION IN HUMAN NEUROBLASTOMA CELLS WITHOUT INDUCTION OF NEUROTRANSMITTER ENZYMES
K. Werrbach-Perez, E. Tiffany-Castiglioni, M. Ziegler, C. Beck and **R. Perez-Polo,** Dept. of Human Biological Chemistry and Genetics and Dept. of Pharmacology, University of Texas Medical Branch, Galveston, USA

43 STUDIES ON METABOLISM OF 1-ALKYL-GLYCEROPHOSPHORYLETHANOLAMINE IN PRIMARY CULTURES OF NEWBORN RAT BRAIN
B. Witter, H. Debuch and **J. Gunawan,** Institut für Physiologische Chemie, Lehrstuhl II, Universität Köln, West Germany

44 EVENTS IN NEURONAL DIFFERENTIATION IN SERUM-FREE GROWING RAT CEREBRAL CELLS IN CULTURE
Z. Yavin* and **E. Yavin****, *Depts. of Isotope Research** and Neurobiology****, The Weizmann Institute of Science, Rehovot, Israel

45 IMMUNOHISTOCHEMICAL LOCALIZATION OF GALACTOSYL CERAMIDE AND SULFOGALACTOSYL CERAMIDE DURING DEVELOPMENT IN THE BRAIN OF THE MOUSE. COMPARISON WITH SEVERAL NEUROLOGICAL MUTANTS
B. Zalc, M. Monge, P. Dupouey and **N. Baumann,** Lab. de Neurochimie, INSERM U134, Hôpital de la Salpêtrière, Paris, France

WEDNESDAY, SEPTEMBER 5, 1979

13.30—14.45 **Lobby/Garden**

POSTER PRESENTATIONS P8

NEW METHODS IN NEUROCHEMISTRY

Please see the General Information section regarding the display of posters

Poster No.

46 PREPARATION OF MITOCHONDRIA FROM RAT BRAIN
L. Anderson, I. Roman, A. Clark and **P.D. Swanson,** University of Washington, Div. of Neurology, Seattle, USA

47 IDENTIFICATION IN THE STRIATO-NIGRAL AND AMYGDALOID SYSTEMS OF AUTHENTIC SUBSTANCE P USING A COMBINED HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) AND RADIOIMMUNOASSAY (RIA) METHOD
Y. Ben-Ari+, P. Pradelles*, C. Gros* and **F. Dray*,**
+LPN1, CNRS, Gif-sur-Yvette and *URIA, Institut Pasteur, Paris, France

48 PARTIAL PURIFICATION OF MULTIPLE SCLEROSIS SPECIFIC ANTIGEN
J. Clausen, R.S. Rastogi, H. Offner and **G. Konat,** The Neurochemical Institute, Copenhagen, Denmark

49 A HIGHLY SENSITIVE METHOD FOR THE SEPARATION AND QUANTITATION OF TAURINE, GLYCINE AND GABA FROM NERVE TISSUE
N.E.I.R. Contreras, Cátedra de Bioquímica, Instituto de Medicina Experimental, Universidad Central de Venezuela, Caracas

35 QUANTITATIVE EVALUATION OF THE SECOND STEP OF THE THIOCHOLINE PROCEDURE FOR LOCALIZATION OF CHOLINESTERASES
Z. Grubic and **M. Brzin,** Institute of Pathophysiology, Medical School, University of Ljubljana, Yugoslavia

50 GLYCOPROTEIN COMPOSITION AND METABOLISM OF NORMAL AND DENERVATED MAMMALIAN SKELETAL MUSCLE
P.L. Jeffrey, W.N. Leung and **J.A.P. Rostas,** Dept. of Biochemistry, Monash University, Clayton, Vic., Australia

51 A PURITY EVALUATION OF SYNAPTIC VESICLES PREPARED BY GRADIENT AND DIFFERENTIAL CENTRIFUGING METHODS
A. Karppinen, Dept. of Biochemistry, University of Oulu, Finland

52 A FAST AND SIMPLE IMMUNO-NEPHELOMETRIC (I-NEPH) METHOD FOR ANALYSES OF CSF-AND SERUM PROTEINS — THE USEFULNESS OF THE METHOD EXEMPLIFIED BY DETERMINATIONS OF ALBUMIN (ALB), IMMUNOGLOBULINS G (IgG), AND LIGHT CHAINS IN MULTIPLE SCLEROSIS (MS)
K.G. Kjellin and **L.B. Hallander,** Dept. of Neurology, Karolinska Hospital, Stockholm, Sweden

POSTER PRESENTATIONS P8 (Continued)

Poster No.

53 CYTOCHEMICAL LOCALISATION OF 5'NUCLEOTIDASE IN GLIAL PLASMA MEMBRANES
G.W. Kreutzberg, K.D. Barron and **P. Schubert,** Max-Planck-Institut für Psychiatrie, Munich, West Germany

54 DETERMINATION OF AMITRIPTYLIN AND SOME OF ITS METABOLITES IN HUMAN PLASMA IN THE PRESENCE OF OTHER DRUGS BY HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)
K. Lenda and **G. Svenneby,** Neurochemical Lab., The Oslo University Psychiatric Clinic, Norway

55 AN IMPROVED PROCEDURE TO PREPARE ^{14}C-LABELED PHOSPHATIDYLSERINE FROM CEREBRAL PHOSPHATIDIC ACID
P. Orlando*, G. Ippolito*, L. Binaglia** and **G. Porcellati**,**
*Dept. of Pharmacology, Università Cattolica S.C., Rome and
**Dept. of Biochemistry, The Medical School, Perugia, Italy

56 AUTORADIOGRAPHIC LOCALIZATION OF DRUG AND NEUROTRANSMITTER RECEPTORS IN BRAIN
J.M. Palacios, W.S. Young III and **M.J. Kuhar,** The Johns Hopkins University School of Medicine, Dept. of Pharmacology, Baltimore, MD, USA

57 DETERMINATION OF SOLUBLE GFA PROTEIN IN HUMAN BRAIN AREAS. SEARCH FOR AN INDEX OF REACTIVITY OF NERVOUS TISSUE TO AGRESSION AND AGING
A. Poreau, N. Baumann and **C. Jacque,** Lab. de Neurochimie, INSERM U 134, Hôpital de la Salpêtrière, Paris, France

58 FOCUSSED MICROWAVE POWER FOR RAPID ENZYME INACTIVATION IN RAT BRAIN
H.H. Schneider and **K.-D. Prozesky,** Research Labs. of Schering AG, Berlin/Bergkamen, West Germany

WEDNESDAY, SEPTEMBER 5, 1979

13.30—14.45 Lobby/Garden

POSTER PRESENTATIONS P9

NEUROCHEMICAL CONSEQUENCES OF PHYSICAL AND PHARMACOLOGICAL PROCEDURES

Please see the General Information section regarding the display of posters

Poster No.

59 HYPNOTIC ACTIVITY OF PHENYLACETONE DERIVATIVES
F. Andrási, K. Horváth, J. Körösi and **T. Láng,** Institute for Drug Research, Budapest, Hungary

60 BEHAVIORAL AND ELECTROPHYSIOLOGICAL OBSERVATIONS ON SPASTIC ALTERATIONS INDUCED BY N-SUBSTITUTED L-PHENYLALANINE IN MICE, RATS, CATS AND SQUIRREL MONKEYS
B. Blum*, B. Shohat, R. Segal**** and **G. Shtacher*,**
*Dept. of Physiology and Pharmacology, Sackler School of Medicine, Tel Aviv University, Ramat Aviv and **Beilinson Hospital, Petah Tikva, Israel

61 SYNERGISTIC EFFECT OF THE CROTOXIN SUBUNITS ON THE POSTSYNAPTIC CHOLINERGIC RESPONSE
C. Bon and **G. Marlas,** Unité des Venins, Institut Pasteur, Paris Cedex, France

62 PHARMACOLOGICAL STUDIES OF EXCITATORY PROCESSES IN CENTRAL RESPIRATORY NEURONES
M. Denavit-Saubie and **J. Champagnat,** Lab. de Physiologie Nerveuse, Dept. de Neurophysiologie appliquée, C.N.R.S., Gif-sur-Yvette, France

63 INFLUENCE OF HYPOTHERMIA ON CONTENTS OF BRAIN FREE AMINO ACIDS
E.Z. Emirbekov and **R.A. Abdullaev,** Dept. of Biochemistry and Research Lab. of Neurochemistry of Daghestan State University, Makhachkala, USSR

17 EFFECT OF LSD ON MOLECULAR EVENTS AT THE SYNAPSE
M. Freedman, T. Cruz, J. Gurd and **I.R. Brown,** Scarborough College, University of Toronto, West Hill, Ont., Canada

64 EFFECT AND INTERACTION OF BLACK WIDOW SPIDER TOXIN WITH A NEUROSECRETORY CELL LINE (PC12)
A. Grasso, S. Rufini, M.I. Senni and **S. Alemà,** Lab. di Biologia Cellulare, C.N.R., Rome, Italy

65 MUSCARINIC RECEPTOR BINDING FOLLOWING DENERVATION OR DECENTRALIZATION OF THE IRIS
D.S. Heron, Y. Kloog, D.I. Sachs, A.D. Korczyn and **M. Sokolovsky,**
Dept. of Isotope Research, The Weizmann Institute of Science, Rehovot, Israel

WEDNESDAY, SEPTEMBER 5, 1979

13.30—14.45 **Lobby/Garden**

POSTER PRESENTATIONS P9 (Continued)

Poster No.

66 EFFECT ON RUBIDIUM 86 EFFLUX AND BINDING OF SCORPION TOXINS ON RAT BRAIN SYNAPTOSOMES
E. Jover*, N. Martin-Moutot* and **F. Couraud**, ***Unité 172 de l'INSERM and ******Unité 38 de l'INSERM, Lab. de Biochimie, Fac. Médecine, Marseille, France

67 TESTOSTERONE-DEPENDENT SEXUAL DIMORPHISM OF THE LYSOSOMAL SYSTEM AND ASSOCIATED ACID HYDROLASES IN MOUSE KIDNEY
H. Koenig, A. Goldstone and **G. Blume,** Neurology Dept., VA Lakeside Medical Center and Neurology and Biochemistry Depts., Northwestern University Medical School, Chicago, IL, USA

68 ION DEPENDENCE OF HYPOTAURINE UPTAKE BY MOUSE BRAIN SLICES
P. Kontro and **S.S. Oja,** Dept. of Biomedical Sciences, University of Tampere, Finland

70 ON THE ABILITY OF SYNAPTIC MEMBRANES IN BINDING AMINO ACIDS
E. Kumpulainen, Dept. of Biochemistry, University of Oulu, Finland

71 INFLUENCE OF ELECTRICAL AND IONIC TRANSMEMBRANE GRADIENTS ON THE ADENYLATE CYCLASE OF NEUROBLASTOMA X GLIOMA HYBRID CELLS
D. Lichtshtein and **A.J. Blume,** Dept. of Physiological Chemistry and Pharmacology, Roche Institute of Molecular Biology, Nutley, NJ, USA

72 INTERACTION OF GUANINE NUCLEOTIDES WITH DOPAMINE AND BENZODIAZEPINE RECEPTORS
R.K. Mishra, S. Varmuza and **L. Tuff,** Neuropharmacology Lab., Dept. of Psychiatry, McMaster University, Hamilton, Ont., Canada

73 SOME NEUROCHEMICAL CORRELATES OF EXCITATION AND DEPRESSION AT NEOCORTICAL LEVEL
N. Mison-Crighel and **E. Crighel,** Institute of Neurology and Psychiatry, Bucharest, Romania

74 PHENCYCLIDINE: ANTAGONISM OF THE RECEPTOR ION CHANNEL COMPLEX AT THE NEUROMUSCULAR JUNCTION
T.W. Mittag and **S.P. Gross,** Mount Sinai School of Medicine, C.U.N.Y., NY, USA

69 SODIUM DEPENDENCE OF TRYPTOPHAN AND PHENYLALANINE TRANSPORT IN RAT BRAIN SLICES
S.S. Oja and **E.R. Korpi,** Dept. of Biomedical Sciences, University of Tampere, Finland

POSTER PRESENTATIONS P9 (Continued)

Poster No.

75 CALCIUM BUFFERING MECHANISMS AFFECTED BY SOME CONVULSANT AND ANTICONVULSANT DRUGS
J.H. Pincus and **K. Hsiao**, Dept. of Neurology, Yale University School of Medicine, New Haven, CT, USA

76 METABOLIC EFFECTS OF TRANYLCYPROMINE ISOMERS IN MAN
G.P. Reynolds, W.D. Rausch and **P. Riederer**, Ludwig Boltzmann-Institut für Klinische Neurobiologie, Krankenhaus Lainz, Vienna, Austria

77 EFFECTS OF CAFFEINE ON BRAIN SEROTONIN AND BEHAVIOR
A.J. Schlosberg, B. Cusack, J.D. Fernstrom and **R.J. Wurtman**, Lab. of Brain and Metabolism, M.I.T., Cambridge, MA, USA

78 LONG-TERM MEMORIES: WHERE DOES THE 'BUCK' STOP? — TOWARD A TESTABLE THEORY OF DEBUGGING THE MOLECULAR BASIS OF LONG TERM MEMORIES IN LIVING ORGANISMS
R.W. Smith, School of Medicine, University of California, San Francisco, USA

79 ANEMONE TOXINS AND α-NEUROTOXINS FROM SNAKE VENOMS: PHOTOAFFINITY DERIVATIVES AS TOOLS FOR THE INVESTIGATION OF NERVE MEMBRANE RECEPTORS
S. Stengelin and **F. Hucho**, Fachbereich Biologie der Universität, Konstanz, West Germany

80 THE INTERACTION OF BOTULINUM TOXIN WITH SYNAPTOSOMES
S. Wonnacott, Dept. of Biochemistry, Institute of Psychiatry, London and University of Bath, UK

82 INHIBITION OF HERPES SIMPLEX VIRUS REPLICATION BY COBRA α-NEUROTOXOID
J.E. Yourist, K.D. Miller and **H.G. Haines**, Depts. of Microbiology, Medicine and Pathology, University of Miami School of Medicine, FL, USA

92 THE EFFECT OF CHLORAMPHENICOL ON MEMORY CONSOLIDATION AND CEREBRAL PROTEIN SYNTHESIS IN THE RAT
E. Brecher-Fride, S. Ben-Or and **C. Allweis**, Dept. of Physiology, The Hebrew University — Hadassah Medical School, Jerusalem, Israel

WEDNESDAY, SEPTEMBER 5, 1979

13.30—14.45 **Lobby/Garden**

POSTER PRESENTATIONS P10

IMMUNOLOGICAL STUDIES IN NEUROCHEMISTRY

Please see the General Information section regarding the display of posters

Poster No.

81 THE INVOLVEMENT OF CARBOHYDRATE AT THE ANTIGENIC SITES OF THE NICOTINIC AChR
T. Barkas, R. Harrison, G.G. Lunt, C. Watson and **S. Wonnacott,** Dept. of Biochemistry, University of Bath, Claverton Down, Avon, UK

83 CELLULAR DISTRIBUTION OF ENKEPHALIN BINDING SITES IN RAT BRAIN: HIGH RESOLUTION RADIOAUTOGRAPHIC LOCALIZATION IN THE LOCUS COERULEUS
A. Beaudet, O. Tremeau and **A. Menez,** Dept. de Biologie, Centre d'Etudes Nucléaires de Saclay, Gif-sur-Yvette, France

84 IMMUNOCHEMICAL CHARACTERIZATION OF RAT NEUROFILAMENT POLYPEPTIDES
L. Autilio Gambetti, M.E. Velasco and **P. Gambetti,** Institute of Pathology, CWRU, Cleveland, OH, USA

85 REGIONAL IMMUNOLOGICAL SPECIFICITY IN THE RAT BRAIN
R. Hofstein, M. Segal and **D. Samuel,** Isotope Dept., The Weizmann Institute of Science, Rehovot, Israel

86 GLIOTIC STATE IN MOUSE DYSMELINATING MUTANTS. LOCALISATION AND QUANTITATION BY MEANS OF ANTI GFA SERA
C. Jacque, M. Raoul, P. Collier, N. Baumann and **P. Dupouey,** Lab. de Neurochimie, INSERM U 134, Hôpital de la Salpêtrière, Paris, France

87 IMPROVEMENTS AND CHARACTERISATION OF IgG AND $F(ab)_2$ CONJUGATED TO HORSERADISH PEROXIDASE WITH GLUTARALDEHYDE
S.-O. Molin, Institute of Neurobiology, University of Göteborg, Sweden

88 CARBONIC ANHYDRASE: AN OLIGODENDROGLIAL MARKER IN THE CENTRAL NERVOUS SYSTEM
G. Vincendon, K. Langley and **G. Gombos,** *Institut de Chimie Biologique,* Faculté de Médecine and Centre de Neurochimie du CNRS, Strasbourg Cedex, France

WEDNESDAY, SEPTEMBER 5, 1979

13.30—14.45 **Lobby/Garden**

POSTER PRESENTATIONS P11
AXONAL TRANSPORT

Please see the General Information section regarding the display of posters

Poster No.

89 PHOSPHATASE ACTIVITY IN THE AXONAL SMOOTH ENDOPLASMIC RETICULUM IN NEUROSECRETORY NEURONS
M. Castel and **H.-D. Dellmann,** Zoology Dept., Hebrew University of Jerusalem, Israel and Dept. of Veterinary Anatomy, Iowa State University, Ames, USA

90 CHARACTERIZATION OF A CALCIUM REGULATOR PROTEIN IN MAMMALIAN NERVE
Z. Iqbal and **S. Ochs,** Dept. of Physiology and Medical Biophysics, Indiana University School of Medicine, Indianapolis, IN, USA

91 RELEASE OF AXONALLY TRANSPORTED MATERIAL FROM THE COLLICULUS SUPERIOR DURING DEPOLARIZATION IN VITRO
M. Sandberg, J.-O. Karlsson, B. Tirillini and **A. Hamberger,** Institute of Neurobiology, University of Göteborg, Sweden

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 **Hall D**

SYMPOSIUM/WORKSHOP — SW7

FIBROUS PROTEINS

Chairmen: **U.Z. Littauer,** Israel
J. Nunez, France

14.45 COOPERATIVE INTERACTIONS IN MICROTUBULE ASSEMBLY AND DISASSEMBLY
R.C. Weisenberg, Temple University, Philadelphia, PA, USA

15.00 THE CONTROL OF TUBULIN EXPRESSION
U.Z. Littauer, I. Gozes and **A. de Baetselier,** Dept. of Neurobiology, The Weizmann Institute of Science, Rehovot, Israel

15.15 MICROTUBULE ASSOCIATED PROTEINS, THYROID HORMONES AND BRAIN DEVELOPMENT
J. Nunez, A.M. Lennon, A. Fellous and **J. Francon,** Unité Thyroide, INSERM, Bicetre, France

15.30 THE ELONGATION OF MICROTUBULES IN VITRO
G.G. Borisy, Laboratory of Molecular Biology, University of Wisconsin, Madison, USA

15.45 SYNAPTOSOMAL MEMBRANE PROTEINS
H.R. Mahler, Chemistry Dept., Indiana University, Bloomington, USA

16.00 ULTRASTRUCTURAL PROTEINS IN NERVE ENDINGS
S. Puszkin, Dept. of Pathology, Mount Sinai School Medicine of The City University of New York, USA

16.15 ULTRASTRUCTURAL RELATIONSHIPS IN THE MICROFILAMENT SYSTEM AND THE POSSIBLE ROLE OF THE PROFILIN: ACTIN COMPLEX
U. Lindberg, Cell Motility Group, The Wallenberg Lab., Uppsala University, Sweden

16.30 TUBULIN, SYNTHESIZED BY MEMBRANE-BOUND POLYRIBOSOMES, FROM BRAIN, IS INSERTED INTO THE ENDOPLASMIC RETICULUM MEMBRANE
D. Solfer and **H. Czosnek,** Insttitue for Basic Research in Mental Retardation, Staten Island, NY, USA

16.45 NEUROFILAMENT-MICROTUBULE INTERACTIONS
M.L. Shelanski, R.K.H. Liem and **J.-F. Leterrier,** New York University School of Medicine, USA

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 **Hall B**

SYMPOSIUM/WORKSHOP — SW8

PRESYNAPTIC RECEPTOR SYSTEMS AND MODULATION OF TRANSMITTER RELEASE

Chairmen: **S.Z. Langer**, France
N. Weiner, USA

14.45 PRESYNAPTIC AUTOREGULATION OF THE STIMULATION-EVOKED RELEASE OF NEUROTRANSMITTERS IN THE PERIPHERAL AND IN THE CENTRAL NERVOUS SYSTEM
S.Z. Langer, Synthelabo, L.E.R.S., Dept. of Biology, Paris, France

15.10 THE ROLE OF CYCLIC NUCLEOTIDES IN THE REGULATION OF NEUROTRANSMITTER RELEASE
N. Weiner, W. Mosimann and **F.-L. Lee**, Dept. of Pharmacology, University of Colorado School of Medicine, Denver, USA

15.35 TWO SITES FOR PRESYNAPTIC CONTROL OF NORADRENALINE SECRETION
L. Stjärne, Dept. of Physiology, Karolinska Institutet, Stockholm, Sweden

16.00 INTERACTION OF DOPAMINE ACETYLCHOLINE AND γ-AMINOBUTYRIC ACID NEURONS: RELATION TO STRIATAL FUNCTION
G. Bartholini, Research Dept., Synthelabo (L.E.R.S.), Paris, France

16.25 PRESYNAPTIC CONTROL OF DOPAMINE RELEASE
G. Hertting and **K. Starke**, Pharmakologisches Institut, Freiburg, West Germany

16.50 MECHANISM OF PGE INHIBITION OF CATECHOLAMINE RELEASE FROM ADRENAL MEDULLA
Y. Gutman, J. Cohen and **P. Boonyaviroj**, Dept. of Pharmacology, The Hebrew University, Hadassah School of Medicine, Jerusalem, Israel

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 **Hall F**

ORAL COMMUNICATION SESSION — OC12
CHEMICAL PATHOLOGY OF THE BRAIN

Chairman: **J.H. Pincus**, USA

14.45 STUDIES ON A CAT MODEL FOR NIEMANN-PICK DISEASE
D.A. Wenger, S.P. Snyder and **R.S. Kingston,** University of Colorado Medical Center, Dept. of Pediatrics, Denver, USA

15.00 CONCANAVALIN A MEDIATED UPTAKE OF THERAPEUTIC HEX A BY TAY-SACHS DISEASE GLIAL CELLS
S.E. Brooks, L.M. Hoffman, D. Amsterdam and **L. Schneck,** Dept. of Neurology, Kingsbrook Jewish Medical Center, Brooklyn, NY, USA

15.15 STUDIES OF A GENETICALLY-DETERMINED ABNORMALITY OF LIPOAMIDE DEHYDROGENASE E IN FRIEDREICH'S ATAXIA
R.A.P. Kark and **M.M.R. Budelli,** Reed Neurological and Jerry Lewis Neuromuscular Research Centers, UCLA School of Medicine, CA, USA

15.30 BRAIN GANGLIOSIDES IN HUNTINGTON'S DISEASE (HD) AND IN RATS FOLLOWING KAINIC ACID (KA) LESION OF THE CORPUS STRIATUM
H. Bernheimer[1], G. Sperk[2], K.S. Price[3] and **O. Hornykiewicz[2,3],**
1. Dept. of Neurochemistry, Neurological Institute, University of Vienna and Institute of Brain Research, Austrian Academy of Sciences, Vienna;
2. Institute of Biochemical Pharmacology, University of Vienna, Austria; and
3. Clarke Institute of Psychiatry, Toronto, Canada

15.45 SEA BLUE HISTIOCYTES IN BATTEN-VOGT SYNDROME AN EASY SCREENING TEST
N. Gadoth, Dept. of Neurology, Beilinson Medical Center, Petah Tikva and Tel Aviv University, Sackler School of Medicine, Ramat Aviv, Israel

16.00 ENZYME THERAPY IN FABRY'S DISEASE
R.J. Desnick, K. Dean, D. Bishop, G. Grabowski and **C.C. Sweeley,** Mount Sinai School of Medicine, NY, USA

OC12 — CHEMICAL PATHOLOGY OF THE BRAIN (Continued)

16.15 ACETYLCHOLINE AND CHOLINE ACETYLTRANSFERASE IN MYASTHENIA GRAVIS

S. Alema[1], P.C. Molenaar[2], R.L. Polak[3], and **A. Vincent[4],**
1. Dept. of Biophysics, University College, London, UK 2. Dept. of Pharmacology, University of Leiden, The Netherlands; 3. Medical Biol. Lab. TNO, Rijswijk, The Netherlands and 4. Royal Free Hospital, London, UK

16.30 FOOD-INTAKE AND MOTOR DISTURBANCES AFTER INTRACEREBROVENTRICULAR INJECTION OF ANTI-ACETYLCHOLINE RECEPTOR ANTIBODIES

R. Tarrab-Hazdai and **H. Edery***, Dept. of Immunology, Weizmann Institute of Science, Rehovot and *Israel Institute for Biological Research, Tel Aviv University, Ness Ziona, Israel

16.45 CEREBROTENDINOUS XANTHOMATOSIS (CTX) IN ISRAEL

V.B. Berginer and **A.D. Korczyn,** Neurology Unit, Soroka Medical Center and Ben Gurion University Hospital, Beersheva, Israel

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 **Hall G**

ORAL COMMUNICATION SESSION — OC13
METABOLISM OF THE NERVOUS SYSTEM — II

Chairman: **I. Silman**, Israel

14.45 MONOAMINE OXIDASE OF HUMAN BRAIN CORTEX: ISOZYMES OR MULTIPLE SITES?
B.T. Ho and **A. Schurr**, Texas Research Institute of Mental Sciences, Houston, USA

15.00 EFFECT OF DETERGENTS AND SOLVENTS ON MAO FROM BRAIN MITOCHONDRIA
S. Gabay and **F.M. Achee**, VA Medical Center, Brockton, MA and Section of Psychiatry and Human Behavior, Brown University, Providence, RI, USA

15.15 COUPLING OF DOPAMINE OXIDATION BY MONOAMINE OXIDASE TO GLUTATHIONE OXIDATION BY H_2O_2
H.S. Maker, C. Weiss, G. Cohen, R. Heikkila and **G.M. Lehrer**, Dept. of Neurology, *The Mount Sinai School of Medicine*, City University of New York and Veterans Administration Hospital, Bronx, USA

15.30 TWO PHOSPHATE ACTIVATED GLUTAMINASE COMPARTMENTS IN RAT BRAIN SYNAPTOSOMES AND DIFFERENCES IN THEIR REGULATORY PROPERTIES
E. Kvamme and **B. Olsen**, Neurochemical Lab., The Oslo University Psychiatric Clinic, Norway

15.45 PROPERTIES OF PHOSPHATE ACTIVATED GLUTAMINASE (EC 3.5.1.2) IN CULTURED ASTROCYTES
E. Kvamme[1], **G. Svenneby**[1], **L. Hertz**[2] and **A. Schousboe**[3],
1. Neurochemical Lab., The Oslo University Psychiatric Clinic, Norway
2. Dept. of Anatomy, University of Saskatchewan, Canada and 3. Dept. of Biochemistry, University of Copenhagen, Denmark

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 Hall G

OC13 — METABOLISM OF THE NERVOUS SYSTEM — II (Continued)

16.00 PROPERTIES AND SPECIFICITY OF PURIFIED BANA-HYDROLASES OF HUMAN PITUITARY
A. Suhar and **N. Marks,** Center for Neurochemistry, Rockland Research Institute, Ward's Island, NY, USA

16.15 IN VIVO INHIBITION OF BRAIN HISTIDINE DECARBOXYLASE BY α-FLUORO-METHYLHISTIDINE
M. Garbarg, G. Barbin, E. Rodergas and **J.C. Schwartz,** Unite 109 de Neurobiologie, Centre Paul Broca de l'INSERM, Paris, France

16.30 PURIFICATION FROM HUMAN BRAIN AND SOME PROPERTIES OF TWO NADPH-LINKED ALDEHYDE REDUCTASES WHICH REDUCE SUCCINIC SEMIALDEHYDE TO 4-HYDROXYBUTYRATE
C. Cash, M. Maitre, J.M. Blindermann and **P. Mandel,** Centre de Neurochimie du CNRS, Strasbourg Cedex, France

16.45 FLUORESCENT ORGANOPHOSPHATES: NEW PROBES FOR STUDYING CONFORMATIONAL CHANGES IN "AGED" CHOLINESTERASES AND FOR LOCALISATION OF CHOLINESTERASES IN NERVOUS TISSUE
G. Amitai, Y. Ashani, A. Shahar and **I. Silman,** Israel Institute for Biological Research, Ness Ziona and The Weizmann Institute of Science, Rehovot, Israel

17.00 USE OF AN ANTICHOLINESTERASE AS PROBE IN THE STUDY OF MICROWAVE-INDUCED BLOOD BRAIN BARRIER CHANGES
Y. Ashani, F.H. Henry and **G.N. Catravas,** Biochemistry Dept., Armed Forces Radiobiology Research Institute, Bethesda, MD, USA

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 **Hall A**

ORAL COMMUNICATION SESSION — OC14
AXONAL AND MEMBRANE TRANSPORT

Chairman: **A. Lajtha,** USA

14.45 AXONAL TRANSPORT OF AChE IN EAN
G.K. Molnar, R. Oikarinen and **P.J. Riekkinen,** Finnish Academy, the Depts. of Neurology, Turku and Kuopio University, Finland

15.00 AXONAL TRANSPORT OF ACh, CAT AND AChE IN RAT MOTOR NERVES DURING REGENERATION FOLLOWING VARIOUS TYPES OF AXONAL TRAUMA
A. Dahlström, P.-A. Larsson, S. Booj and **P.-O. Heiwall,** Institute of Neurobiology, University of Göteborg, Sweden

15.15 THE INDEPENDENCE OF CHOLINE TRANSPORT AND ACETYLCHOLINE SYNTHESIS
R.M. Marchbanks and **P.D. Kessler,** Dept. of Biochemistry, Institute of Psychiatry, London, UK

15.30 EFFECTS OF GABA ANALOGUES WITH 5- AND 7-MEMBERED HETEROCYCLIC RINGS ON NEURONAL AND GLIAL GABA TRANSPORT AND GABA RECEPTOR BINDING
A. Schousboe[1], O. Larsson[2], L. Hertz[3] and **P. Krogsgaard-Larsen[4],**
1. Dept. of Biochemistry A, University of Copenhagen, Denmark;
2. Biochemical Lab., Royal Danish School of Pharmacy, Denmark;
3. Dept. of Anatomy, University of Saskatchewan, Canada and 4. Dept. of Chemistry BC, Royal Danish School of Pharmacy, Denmark

OC14 — AXONAL AND MEMBRANE TRANSPORT (Continued)

15.45 HIGH AFFINITY UPTAKE OF [^{3}H]-RS-NIPECOTIC ACID IN CULTURED ASTROCYTES, COMPARISON WITH THE GABA TRANSPORT SYSTEM
O. Larsson[1], **P. Krogsgaard-Larsen**[2] and **A. Schousboe**, 1. Biochemical Lab., Royal Danish School of Pharmacy; 2. Dept. of Chemistry BC, Royal Danish School of Pharmacy and 3. Dept. of Biochemistry A, University of Copenhagen, Denmark

16.00 ACTIVE TRANSPORT OF SEROTONIN DOPAMINE AND NOREPINEPHRINE BY PLATELETS OF ACUTE SCHIZOPHRENIC PATIENTS
I. Modai, A. Rothman, H. Munitz, S. Tyano and **H. Wijsenbeek**, Geha Psychiatric Hospital, Petah Tikva, Israel

16.15 EFFECT OF BIVALENT CATIONS ON BINDING AND TRANSPORT OF L-TRYPTOPHAN IN THE PRESENCE AND ABSENCE OF SODIUM IONS
J. Bruinvels and **P. Moleman**, Dept. of Pharmacology and Dept. of Psychiatry, Medical Faculty, Erasmus University, Rotterdam, The Netherlands

16.30 REGULATION OF TRANSMEMBRANE SODIUM EXTRUSION AS AN IMPORTANT COMPONENT OF THE MODE OF ACTION OF NERVE GROWTH FACTOR
S.D. Skaper and **S. Varon**, Dept. of Biology, M-001, University of California, San Diego, La Jolla, USA

16.45 AXONALLY TRANSPORTED PROTEIN MISSING IN PERIPHERAL NERVES OF DYSTROPHIC MICE
D.J. Krikorian*, **R.C. Wiggins**+ and **J.F. Hines***, *Dept. of Biology, Texas Women's University, Denton and +Dept. of Neurobiology, University of Texas Medical Branch, Houston, USA

WEDNESDAY, SEPTEMBER 5, 1979

14.45—17.15 **Hall C**

ORAL COMMUNICATION SESSION — OC15

NEUROCHEMICAL CORRELATES OF VISUAL PROCESSES

Chairman: **N.G. Bazán**, Argentina

14.45 NEUROCHEMICAL CORRELATES OF VISUAL TRANSDUCTION IN THE VERTEBRATE RETINA
R.N. Lolley and **D.B. Farber**, V.A. Medical Center, Sepulveda and UCLA School of Medicine, Los Angeles, CA, USA

15.00 VISUAL CELLS OF THE RETINA ARE ENRICHED WITH CYCLIC NUCLEOTIDES: RODS WITH cGMP; CONES WITH cAMP
D.B. Farber and **R.N. Lolley**, Jules Stein Eye Institute, UCLA School of Medicine, Los Angeles and V.A. Medical Center, Sepulveda, CA, USA

15.15 EFFECTS OF PUTATIVE NEUROTRANSMITTERS ON HORIZONTAL CELLS IN THE FISH RETINA
K. Negishi and **B.D. Drujan**, Neuroinformation Research Institute, University of Kanazawa School of Medicine, Japan and Centro de Biofísica y Bioquímica, IVIC, Venezuela

15.30 CHANGES OF TAURINE, GLYCINE AND GABA LEVELS IN FISH RETINA EXPOSED TO DIFFERENT LIGHT ENVIRONMENTS
N.M. van Gelder and **B.D. Drujan**, Centre de Recherche en Sciences Neurologiques, Un. Montréal, Qué, Canada, and the Neurochemical Lab., Inst. Venezolano de Invest. Cientificas (I.V.I.C.), Caracas, Venezuela

15.45 SYNAPTIC DYNAMICS IN THE REGENERATION GOLDFISH VISUAL PATHWAY
N. Schechter and **A. Francis**, Dept. of Psychiatry and the Long Island Research Institute, Health Sciences Center, State University of N.Y. at Stony Brook, USA

OC15 — NEUROCHEMICAL CORRELATES OF VISUAL PROCESSES (Continued)

16.00 MODIFICATIONS OF LIPID METABOLISM BY DRUGS AND INCUBATING CONDITIONS IN THE BOVINE RETINA
N.M. Giusto, M.G. Ilincheta de Boschero and **N.G. Bazán,** Instituto de Investigaciones Bioquímicas, Universidad Nacional del Sur-Consejo Nacional de Investigaciones Científicas y Técnicas, Bahía Blanca, Argentina

16.15 MOLECULAR SPECIES AND METABOLISM OF INOSITIDES IN THE RETINA
M.I. Aveldaño de Caldironi and **N.G. Bazán,** Instituto de Investigaciones Bioquímicas, Universidad Nacional del Sur-Consejo Nacional de Investigaciones Científicas y Técnicas, Bahía Blanca, Argentina

16.30 THE METABOLISM OF PHOSPHOLIPIDS AND GLYCERIDES IN THE RAT AND TOAD RETINA
M.M. Careaga, H.E. Pascual de Bazán and **N.G. Bazán,** Instituto de Investigaciones Bioquímicas, Universidad Nacional del Sur-Consejo Nacional de Investigaciones Científicas y Técnicas, Bahía Blanca, Argentina

16.45 THE EFFECTS OF L-DOPA, DOPAMINE AND AMANTADINE ON PUPILLARY DIAMETERS IN MICE
O. Keren and **A.D. Korczyn,** Dept. of Physiology and Pharmacology, Sackler School of Medicine, Tel Aviv University, Ramat Aviv, Israel

17.00 IN VITRO FORMATION OF STEROID CATARACT IN BOVINE LENS
C.I. Mayman, D. Miller and **M.L. Tijerina,** Beth Israel Hospital, Harvard Medical School, Boston, MA, USA

THURSDAY, SEPTEMBER 6, 1979

08.30—12.30 **Hall B**

SYMPOSIUM — S5

RECOGNITION AND SPECIFICATION IN THE NERVOUS SYSTEM

Chairman: **M. Nirenberg,** USA

08.30 CLONAL ORGANIZATION OF VERTEBRATE CENTRAL NERVOUS SYSTEM: EMBRYONIC ORIGINS OF COMPARTMENTS
M. Jacobson, University of Utah College of Medicine, Salt Lake City, USA

09.10 BIOCHEMICAL PROPERTIES AND CONCOMITANTS OF NEURITE OUTGROWTH IN REGENERATION
B.W. Agranoff, D. Axelrod, E. Feldman, A. Heacock and **M. Schwartz,** University of Michigan, Ann Arbor, USA

10.00 Coffee Break

10.30 ENDOGENOUS LECTINS IN DEVELOPMENT OF SLIME MOLDS AND CHICKEN TISSUES
S.H. Barondes and **D. Kobiler,** University of California, San Diego, School of Medicine, La Jolla, USA

11.10 STUDIES ON FRESHLY SEPARATED AND CULTURED CELLS FROM THE DEVELOPING CEREBELLUM
R. Balazs, E. Meier, C. Regan, G. Wilkin and **P. Woodhams,** MRC, Developmental Neurobiology Unit, London, UK

11.50 SYNAPTIC PLASTICITY
M. Nirenberg, H. Higashida, W. Wilson, A. Rotter and **M. Adler,** NIH, Bethesda, MD, USA

THURSDAY, SEPTEMBER 6, 1979

08.30—12.30 **Hall A**

SYMPOSIUM — S6

NEUROTRANSMITTER DYSFUNCTION AND NEUROLOGIC DISEASE: MOLECULAR APPROACHES TO RATIONAL DRUG DEVELOPMENT

Chairman: **T.N. Chase,** USA

08.30 GENERAL CONSIDERATIONS REGARDING MOLECULAR APPROACHES TO THE RATIONAL DEVELOPMENT OF IMPROVED DRUGS FOR NEUROLOGIC DISEASE
T.N. Chase, National Institute of Neurological and Communicative Disorders and Stroke, NIH, Bethesda, MD, USA

08.50 PARKINSON'S DISEASE
D.B. Calne, National Institute of Neurological and Communicative Disorders and Stroke, NIH, Bethesda, MD, USA

09.10 RATIONAL PHARMACOTHERAPY OF TARDIVE DYSKINESIA
C.A. Tamminga, National Institute of Neurological and Communicative Disorders and Stroke, NIH, Bethesda, MD, USA

09.30 CSF STUDIES IN SCHIZOPHRENIA
R.H. Belmaker, Jerusalem Mental Health Center, Israel

10.00 Coffee Break

10.30 EPILEPSY: EVIDENCE FOR THE INVOLVEMENT OF GABA FROM THE ACTIVITY OF GABA-MIMETIC DRUGS
K.G. Lloyd, P. Worms, P. Morselli, E. Zarifian and **G. Bartholini,** Research Dept., Synthélabo (L.E.R.S.), Paris, France

10.50 DECREASE OF HVA AND 5-HIAA LEVELS IN CSF OF PROGRESSIVE MYOCLONUS EPILEPSY PATIENTS
E. Leino, E. MacDonald, M.M. Airaksinen and **P.J. Riekkinen,** Depts. of Neurology and Pharmacology, University of Kuopio, Finland

11.10 NEUROTRANSMITTERS AND RELATED ENZYMES IN THE DEMENTIA OF THE ALZHEIMER TYPE
B. Winblad, R. Adolfsson, C.-G. Gottfries and **L. Oreland,** Umea, Sweden

11.30 THERAPEUTIC STUDIES OF DEMENTIA
J. Growdon, New England Medical Center Hospital, Boston, MA, USA

11.50 DOPAMINERGIC MECHANISMS IN THE SPINAL CORD
N. Neff, Washington, DC, USA

THURSDAY, SEPTEMBER 6, 1979

08.30—12.30 **Hall C**

SYMPOSIUM — S7

THE ROLE OF CALCIUM IN NEURONAL FUNCTION

Chairmen: **R. Rahamimoff,** Israel
A. Scarpa, USA

08.30 THE ROLE OF CALCIUM IN ACETYLCHOLINE RELEASE AT THE NEUROMUSCULAR JUNCTION
R. Rahamimoff, H. Meiri, A. Lev-Tov and **I. Nussinovitch,**
Dept. of Physiology, Hebrew University Medical School, Jerusalem, Israel and Cold Spring Harbor Lab., NY, USA

08.50 CYTOSOLIC CALCIUM HOMEOSTASIS IN SQUID AXON
A. Scarpa, University of Pennsylvania, Philadelphia, USA

09.10 CALCIUM RELEASE FROM MITOCHONDRIA DURING NERVE ACTIVITY
R. Schmidt, H. Zimmermann and **F. Joó,** Max-Planck-Institut für biophysikalische Chemie, Göttingen, West Germany

09.30 FAST TRANSPORTED CALCIUM-BINDING PROTEIN IN NERVE: SIMILARITIES TO CALCIUM-DEPENDENT REGULATOR PROTEIN AND ITS ROLE IN THE AXOPLASMIC TRANSPORT
Z. Iqbal and **S. Ochs,** Dept. of Physiology and Medical Biophysics Program, Indiana University School of Medicine, Indianapolis, USA

10.00 Coffee Break

10.30 A RED CELL LIKE Ca PUMP IN BRAIN MICROSOMES
S. Muallem, S.J.D. Karlish and **V.L. Lew*,** Biochemistry Dept., The Weizmann Institute of Science, Rehovot, Israel and *Physiological Lab., Cambridge University, UK

10.50 PROPERTIES AND RECONSTITUTION OF A CALCIUM TRANSPORT SYSTEM FROM SYNAPTOSOMAL VESICLES
H. Rahamimoff*, E. Abramovitz, R. Spanier, D. Papazian and **S.M. Goldin,**
*Dept. of Biochemistry, Hebrew University Medical School, Jerusalem, Israel and Dept. of Pharmacology, Harvard Medical School, Boston, MA, USA

11.10 CALCIUM-DEPENDENT MORPHOLOGICAL CHANGES IN SYNAPTIC VESICLES
R.J. DeLorenzo, Dept. of Neurology, Yale Medical School, New Haven, CT, USA

11.30 REGULATION OF SYNAPTOSOMAL CA^{++} EFFLUX BY CALMODULIN CONTROL OF CA^{++} ATPASE
D.H. Ross, Div. of Molecular Pharmacology, The University of Texas Health Science Center, San Antonio, USA

11.50 SODIUM-CALCIUM COUNTER TRANSPORT AND CATECHOLAMINE (CA) RELEASE
J.F. Horga, P. Sanchez-Garcia, G.P. Nicolas, M. Hernandez and **A.G. Garcia,**
Depto. de Farmacologia y Terapeutica, Faculdad de Medicina, Universidad Autonoma, Madrid, Spain

THURSDAY, SEPTEMBER 6, 1979

08.30—12.30 **Hall F**

ORAL COMMUNICATION SESSION — OC16

NEUROCHEMISTRY OF MYELIN

Chairman: **M.E. Smith,** USA

08.30 CHARACTERIZATION OF PNS MYELIN BASIC PROTEINS FROM RAT AND MOUSE
D. Milek, S. Greenfield, H. Sarvas, G. Gantt, E. Hogan and **S. Brostoff,** Depts. of Neurology & Basic & Clinical Immunology & Microbiology, Medical University of S.C., Charleston, USA

08.45 CATALYSIS OF NITROPHENYL ESTER HYDROLYSIS BY BOVINE MYELIN BASIC PROTEIN
R. Zand and **M. Smith,** Biophysics Research Division, Institute of Science and Technology and Dept. of Biological Chemistry, University of Michigan, Ann Arbor, USA

09.00 SYNTHESIS OF PNS MYELIN PROTEINS IN VITRO
M.E. Smith, Dept. of Neurology, Stanford University School of Medicine and Veterans Administration Medical Center, Palo Alto, CA, USA

09.15 ISOLATION OF BASIC PROTEIN-ACIDIC LIPID COMPLEX FROM MYELIN
T. Kunishita, K.-i. Uemura, A. Okano and **T. Taketomi,** Dept. of Biochemistry, Inst. of Adaptation Medicine, Shinshu University, Matsumoto, Japan

09.30 SPECIFICITY OF BRAIN CATHEPSIN D USING SYNTHETIC PEPTIDES OF SPECIFIC AMINO ACID SEQUENCES
M. Benuck, G.A. Hashim and **N. Marks,** Center for Neurochem., Rockland Res. Inst., Ward's Island and St. Luke's Hospital Center and Columbia University, NY, USA

09.45 THE STRUCTURE AND DISEASE-INDUCING PROPERTY OF THE P2 PROTEIN OF PERIPHERAL NERVE MYELIN
E.H. Eylar, A. Ishaque and **T. Hofmann,** Dept. of Biochemistry, University of Toronto, Canada

10.00 Coffee Break

10.30 ABNORMAL MYELIN PROTEIN DISTRIBUTION IN A HEREDITARY DEMYELINATING NEUROPATHY
J.-M. Matthieu*, G.E. Fagg, D. Darriet, S. Larrouquère-Régnier, C. Cassagne and **J.-M. Bouree*,** *Service de Pédiatrie, CHUV, Lausanne, Switzerland; Université de Bordeaux II and Laboratoire de Neurochimie, Hôpital de la Salpêtrière, Paris, France

10.45 PNS MYELIN PROTEIN Po COMIGRATES WITH THE Y PROTEIN IN SDS PAGE IN THE ABSENCE OF MERCAPTOETHANOL
W. Cammer, S. Sirota and **W.T. Norton,** Albert Einstein College of Medicine, Bronx, NY, USA

11.00 LACTATE DEHYDROGENASE ACTIVITY AND SPECIFIC ISOENZYME PATTERNS ASSOCIATED WITH RAT BRAIN MYELIN
H.H. Berlet, T. Lehnert and **M. Franz,** Institute of Pathochemistry and General Neurochemistry, University Heidelberg, West Germany

THURSDAY, SEPTEMBER 6, 1979

08.30—12.30 **Hall D**

ORAL COMMUNICATION SESSION — OC17

PROTEINS OF THE NERVOUS SYSTEM

Chairman: **H. McIlwain**, UK

08.30 CALCIUM-STIMULATED ENDOGENOUS PHOSPHORYLATION OF NEUROTUBULIN
R.J. DeLorenzo, S.C. Mauer and **D. Hunt**, Dept. of Neurology, Yale Medical School, New Haven, CT, USA

08.45 GTP AS WELL AS ATP ACT AS A PHOSPHATE DONOR FOR THE PHOSPHORYLATION OF SYNAPTIC MEMBRANE PROTEINS
M. Weller and **W. Laing**, Neurochemistry Research Group, Dept. of Chemical Pathology, Tygerberg Hospital, South Africa

09.00 PHOSPHORYLATION OF SYNAPTOSOMAL PROTEINS IN VITRO
P.R. Dunkley, Faculty of Medicine, The University of Newcastle, NSW, Australia

09.15 ASSOCIATION BETWEEN PROTEIN-BOUND CYCLIC AMP AND PROTEIN KINASE ACTIVITY IN CEREBRAL CORTICAL PREPARATIONS
M.E. Newman, J. Patel and **H. McIlwain**, Dept. of Biochemistry, Institute of Psychiatry, London, UK

09.30 THE EFFECT OF BRACHIAL PLEXUS STIMULATION ON ^{14}C-GLUCOSE AND ^{14}C-ACETATE INCORPORATION INTO BRAIN PROTEINS
A.-S. Abdul-Ghani, M.M. Boyar and **H.F. Bradford**, Dept. of Biochemistry, Imperial College, London, England

09.45 TRICHLOROETHYLENE: EFFECTS ON PROTEIN METABOLISM IN DISCRETE BRAIN AREAS OF GERBILLS DURING 2 MONTHS OF CONTINUOUS INHALATION. 1. LEVELS OF A BRAIN-SPECIFIC GLIAL PROTEIN (S-100) AND POLYPEPTIDE PATTERN
K.G. Haglid, P. Kjellstrand, L. Rosengren, A. Wronski and **C. Briving**, Institute of Neurobiology, University of Göteborg, Sweden

10.00 Coffee Break

10.30 ELONGATION FACTORS OF THE DEVELOPING CHICK EMBRYONIC BRAIN
K. Murakami and **K. Miyamoto**, Dept. of Metabolism, National Center for Nervous, Mental and Muscular Disorders, Kodaira, Tokyo, Japan

10.45 PROTEOLYTIC ENZYMES IN SPINAL CORD TRAUMA
N.L. Banik, J.M. Powers and **E.L. Hogan**, Depts. of Neurology & Neuropathology, Medical University of South Carolina, Charleston, USA

11.00 LATENT CAPACITY FOR PROTEIN SYNTHESIS IN ISOLATED AXONAL NEURITES
E. Koenig and **P.A. Adams**, State University of New York/Buffalo, Dept. Physiology, USA

11.15 BIOSYNTHESIS OF THE BRAIN-SPECIFIC 14-3-2 PROTEIN IN A CELL FREE SYSTEM FROM WHEAT GERM EXTRACT WITH POLY(A) CONTAINING RNA
Y. Takahashi, K. Sakimura and **Y. Yoshida**, Dept. of Neuropharmacology, Brain Research Institute, Niigata University, Japan

THURSDAY, SEPTEMBER 6, 1979

08.30—12.30 **Hall G**

ORAL COMMUNICATION SESSION — OC18
NEUROCHEMISTRY AND PHARMACOLOGY

Chairman: **F. Bergmann,** Israel

08.30 REGIONAL AND TOTAL CEREBRAL BLOOD FLOW DURING GENERALISED CONVULSIONS IN THE RAT
R.W. Horton, T. Pedley, J.R. McWilliam and **B.S. Meldrum,**
Dept. of Neurology, Institute of Psychiatry, London, UK

08.45 THE EFFECT OF THE CONVULSANTS 3-MERCAPTOPROPIONIC ACID AND BICUCULLINE ON RESPIRATION AND ^{14}C-GABA and ^{14}C-GLUTAMATE UPTAKE BY SUBCELLULAR FRACTIONS OF RAT CEREBRAL CORTEX
G. Rodriguez de Lores Arnaiz, M. Imerito and **E. Girardi,** Instituto de Biología, Facultad de Medicina, UBA, Buenos Aires, Argentina

09.00 DRUG EFFECTS ON HYPERTENSION — INDUCED PROTEIN LEAKAGE IN THE BRAIN IN AWAKE RATS
B.B. Johansson, Dept. of Neurology, University of Göteborg, Sahlgren Hospital, Sweden

09.15 DIENCEPHALIC INJECTIONS OF KANIC ACID PRODUCE MYOCARDIAL NECROSIS
W.J. Boyko, C.K. Galabru, P.L. McGeer and **E.G. McGeer,**
St. Paul's Hospital and Kinsmen Laboratory of Neurological Research, University of British Columbia, Vancouver, Canada

09.30 ENHANCED INFLUENCE OF DIAZEPAM ON THE VESTIBULOOCULAR REFLEX OF RABBITS FOLLOWING ASYMMETRIC STIMULATION CAUSED BY A UNILATERAL PLUG OF A HORIZONTAL SEMICIRCULAR CANAL
N.H. Barmack and **V.E. Pettorossi,** Neurological Sciences Institute of Good Samaritan Hospital & Medical Center, Portland, OR, USA

09.45 MODIFICATION OF THE IMMUNOLOGICAL RESPONSIVENESS OF MICE BY SEROTONIN (5-HYDROXYTRYPTAMINE) AND ITS PRECURSORS
E.G. Bliznakov, New England Institute, Ridgefield, CT, USA

10.00 Coffee Break

OC18 — NEUROCHEMISTRY AND PHARMACOLOGY (Continued)

10.30 RELATIONSHIPS BETWEEN PLASMA CORTICOSTEROIDS, BRAIN 5-HYDROXYTRYPTAMINE AND BENZODIAZEPINE RECEPTORS IN A STRESSFUL SITUATION: A MODEL OF ANXIETY IN THE RAT
A. Uzan, G. Le Fur and **J. Mizoule**, *Pharmindustrie, Groupe Pharmuka*, Gennevilliers, France

10.45 EVIDENCE OF OPPOSITE EFFECTS OF 6-CHLOROPYRIMIDINE DERIVATIVES ON PRE AND POSTSYNAPTIC α-ADRENORECEPTORS
G. Le Fur, A. Uzan, J. Mizoule and **J. Rataud**, Pharmindustrie, Groupe Pharmuka, Gennevilliers, France

11.15 EFFECTS OF DDC AND ETHACRYNIC ACID ON MEMORY FORMATION
C. Allweis and **B. Frieder**, Dept. of Physiology, The Hebrew University-Hadassah Medical School, Jerusalem, Israel

11.30 STRUCTURAL REQUIREMENTS FOR HALLUCINOGENIC ACTIVITY IN SUBSTITUTED PHENETHYLAMINES
A. Makriyannis, J. Knittel and **S. El-Khateeb**, Dept. of Medicinal Chemistry and Institute of Materials Science, University of Connecticut, Storrs, CT, USA

11.45 EFFECTS OF CHRONIC FLUPHENAZINE AND AGING ON BRAIN AChE, CAT, GAD and AcCoA HYDRALASE
L.L. Hsu, S.C. Liang and **H.C. Misra**, *Texas Research Institute of Mental Sciences*, Houston, USA

THURSDAY, SEPTEMBER 6, 1979

13.30—15.30 **Hall F**

SYMPOSIUM/WORKSHOP — SW9
BIOCHEMISTRY OF NEUROTROPIC VIRUSES

Chairmen: **S.B. Prusiner,** USA
Y. Becker, Israel

13.30 THE BIOCHEMISTRY OF MEASLES VIRUS
E. Norrby, Dept. of Virology, Karolinska Institutet, School of Medicine, Stockholm, Sweden
(This paper will not be presented)

13.50 HUMAN POLYOMAVIRUSES IN THE CENTRAL NERVOUS SYSTEM
B.L. Padgett, J.D. Martin, and **D.L. Walker,** University of Wisconsin, Madison, USA

14.10 MOLECULAR MECHANISMS OF VISNA VIRUS SLOW INFECTION
A.T. Haase, University of California, San Francisco,
At the Veterans Administration Medical Center, USA

14.30 HERPES SIMPLEX VIRUS (HSV) INFECTION OF THE CNS AND ITS INFLUENCE ON MONOAMINE METABOLISM
E. Lycke, A. Vahlne, B. Svennerholm and **B.-E. Roos,** Dept. of Virology, Institute of Medical Microbiology, University of Göteborg, Sweden

14.50 SMALL INFECTIOUS NUCLEIC ACIDS AS POSSIBLE MODELS FOR NEUROTROPIC PATHOGENS
H.-L. Sänger, Arbeitsgruppe Pflanzenvirologie, Justus-Liebig-Universität, Giessen, West Germany

15.10 MOLECULAR PROPERTIES OF SLOW VIRAL-LIKE AGENTS CAUSING THE SPONGIFORM ENCEPHALOPATHIES
S.B. Prusiner, Howard Hughes Medical Institute Laboratory, Depts of Neurology and of Biochemistry and Biophysics, University of California, San Francisco, USA

THURSDAY, SEPTEMBER 6, 1979

13.30—15.30 **Hall G**

SYMPOSIUM/WORKSHOP — SW10

PHOSPHOLIPIDS AND DRUG ACTION

Chairmen: **J.N. Hawthorne,** UK
G.B. Ansell, UK

Participants will engage in a free-flowing discussion for the duration of the session

EFFECTS OF NEUROPHARMACOLOGICAL AGENTS ON PHOSPHOLIPID METABOLISM IN THE RABBIT IRIS MUSCLE
A.A. Abdel-Latif, R.A. Akhtar, J. Smith and **M. Grimes,**
Medical College of Georgia, Augusta, USA

THE ROLE OF PHOSPHATIDYLSERINE IN THE OPIATE RECEPTOR
L.G. Abood, M. Butler and **D. Reynolds,** Center for Brain Research,
University of Rochester, NY, USA

DRUG ACTION ON THE BIOSYNTHESIS OF PHOSPHATIDYLINOSITOL AND OTHER LIPIDS IN THE NEURAL TISSUE IN VITRO
N.G. Bazan, Instituto de Investigaciones Bioquímicas, Universidad Nacional del Sur — Consejo Nacional de Investigaciones Científicas y Técnicas,
Bahía Blanca, Argentina

SPECIFICITY OF NEUROTRANSMITTER INDUCED PHOSPHOLIPID EFFECTS IN EXPLANT CULTURES OF CEREBRAL CORTEX
M. Giesing, Laboratory for Nerve Tissue Culture, Inst. f. Physiol. Chemie, Bonn, West Germany

EFFECTS OF PHOSPHATIDYLSERINE ON OPIATE RECEPTORS IN VARIOUS BRAIN REGIONS
G. Toffano, Fidia Research Laboratories, Abano Terme, Italy

EFFECTS OF EXOGENOUS PHOSPHOLIPIDS ON BRAIN CHOLINERGIC MECHANISMS
G. Pepeu and **F. Casamenti,** Dept. of Pharmacology, University of Florence, Italy

In appreciation for supporting this Symposium/Workshop:
Fidia Research Laboratories
Lucas Meyer

THURSDAY, SEPTEMBER 6, 1979

13.30—15.30 **Hall C**

SYMPOSIUM/WORKSHOP — SW11

ROLE OF PROTEIN PHOSPHORYLATION IN SYNAPTIC FUNCTION

Chairmen: **I. Diamond,** USA
R. Rodnight, UK

13.30 IN VITRO PHOSPHORYLATION OF PROTEINS FROM THE SUBSYNAPTIC MEMBRANE OF TORPEDO MARMORATA ELECTRIC ORGAN
T. Saitoh and **J.-P. Changeux,** Institut Pasteur, Dept. of Neurobiologie Moleculaire, Paris, France

13.50 REGULATION OF ACETYLCHOLINE RECEPTOR PHOSPHORYLATION IN SITU
A.S. Gordon, G. Magilen and **I. Diamond,** Depts. of Neurology and Pediatrics, University of California, San Francisco, USA

14.10 IS PROTEIN PHOSPHORYLATION INVOLVED IN AMINERGIC SYNAPTIC TRANSMISSION IN THE CNS?
R. Rodnight, Dept. of Biochemistry, Institute of Psychiatry, London, UK

14.30 cGMP-DEPENDENT PROTEIN PHOSPHORYLATION IN MAMMALIAN CEREBELLUM AND SMOOTH MUSCLE
D.J. Schlichter, J.E. Casnellie, H.E. Ives, U. Walter, J.D. Jamieson and **P. Greengard,** Depts. of Cell Biology and Pharmacology, Yale University School of Medicine, New Haven, CT, USA

14.50 PROTEIN PHOSPHORYLATION IN NEURONAL ADAPTATION: ROLE OF SPECIFIC PHOSPHOPROTEINS IN SYNAPTIC PLASTICITY
Y.H. Ehrlich, The Missouri Institute of Psychiatry, University of Missouri, St. Louis, USA

15.10 PHOSPHORYLATION OF ACTIN AND OF AN ACTIN-LIKE PROTEIN FOUND IN SYNAPTOSOMAL MEMBRANE
R. Hofstein and **M. Hershkowitz,** Isotope Dept., Weizmann Institute of Science, Rehovot, Israel

THURSDAY, SEPTEMBER 6, 1979

13.30—18.00 **Hall A**

ORAL COMMUNICATION SESSION — OC19

BIOCHEMISTRY OF NEUROTRANSMITTERS — III

Chairman: **S. Berl**, USA

13.30 DOPA DECARBOXYLATION IN RAT STRIATUM FOLLOWING UNILATERAL DESTRUCTION OF THE NIGRO-STRIATAL SYSTEM; EFFECT OF L-DOPA
E. Melamed, F. Hefti, J. Liebman and **R.J. Wurtman,** Lab. of Neuroendocrine Regulation, M.I.T., Cambridge, MA, USA

13.45 IN VITRO METHYLATION OF PHENYLETHYLAMINE
O.H. Callaghan and **A.D. Mosnaim, Depts.** of Biochem. and Pharmacol., University of Health Sciences, The Chicago Medical School, IL, USA

14.00 EVIDENCE IN HUMANS AND MICE FOR A DOPAMINE MODULATION OF CELL-MEDIATED IMMUNITY
E.G. Shaskan, University of Connecticut Health Center, Farmington, CT, USA

14.15 A METHOD TO STUDY THE RATE OF INTRASYNAPTOSOMAL CATECHOLAMINE BIOSYNTHESIS
W.-K. Wang, B.-C. Shyu, Y. Chiang and **M.-S. Young*,**
Biophysics Laboratory, Institute of Physics Academia Sinica, Taipei and
*Research Institute of Electronics and Electrical Engineer.,
National Cheng Kung University, Taiwan, Republic of China

14.30 THE EFFECT OF CHANGES IN CALCIUM CONCENTRATION ON THE STIMULATION OF PHOSPHATIDYLINOSITOL METABOLISM BY NOREPINEPHRINE IN INTACT AND DISPERSED PINEAL GLANDS
T.L. Smith and **G. Hauser,** McLean Hospital, Harvard Medical School, Belmont, MA, USA

14.45 ELEVATION OF RAT BRAIN NORMETHANEPHRINE (NM) AND P-OCTOPAMINE AFTER PNMT INHIBITION
M. Da Prada, D. Kiss and **H.H. Keller,** Pharmaceutical Research Dept., F. Hoffmann-La Roche & Co., Basel, Switzerland

15.00 THE COMPLEX GABA MODULATION OF DOPAMINERGIC FUNCTIONS
J. Scheel-Kruger, A.V. Christensen*, J. Arnt, G. Magelund and **M. Olianas,**
Psychopharmacological Lab. E., St. Hans Mental Hospital, Roskilde and
*Dept. of Pharmacol., H. Lundbeck & Co. A/S, Copenhagen, Denmark

15.15 ROLE OF MANGANESE IN NEUROMELANIN FORMATION AS RELATED TO AMINERGIC PATHWAYS
J. Donaldson, F. LaBella and **H. Gesser,** Depts. of Pharmacology and Chemistry, Univ. of Manitoba, Winnipeg, Canada

15.30 Coffee Break

16.00 NEUROPHYSIOLOGICAL FUNCTION OF BIOGENIC AMINES IN VIVO IN A SUBSOCIAL INSECT: LOCUSTA MIGRATORIA
S. Fuzeau-Braesch, Laboratoire de Biologie de l'Insecte, Université de Paris-Sud, Orsay, France

16.00 EFFECT OF KAINIC ACID ON CEREBELLAR AMINO ACID METABOLISM
S. Berl, B. Krespan and **W.J. Nicklas,** Dept. of Neurology, Mt. Sinai School of Medicine, NY, USA

THURSDAY, SEPTEMBER 6, 1979

13.30—18.00 **Hall B**

ORAL COMMUNICATION SESSION — OC20

NEUROTRANSMITTER RECEPTORS IN THE N.S.

Chairman: **M.B.H. Youdim**, Israel

13.30 MUSCARINIC BINDING SITES IN INTRAUTERINE GROWTH-RETARDED (IUGR) RABBIT FETUSES
Y. Barak, E. Yavin* and **S. Harel,** Dept. of Neurobiology*, The Weizmann Institute of Science, Rehovot and Municipal-Governmental Medical Center, Sackler School of Medicine, Tel Aviv University, Israel

13.45 TWO-STEP BINDING OF ANTAGONISTS TO MUSCARINIC RECEPTORS
T. Bartfai, B. Hedlund and **J. Jarv***, Dept. of Biochemistry, Arrhenius Laboratory, University of Stockholm, Sweden

14.00 ACETYLCHOLINESTERASE, RECEPTOR SITE, AND THE EFFECT OF ESERIN ON CHOLINERGIC MEMBRANES
K. Kaufmann, Max-Planck-Institut für biophysikalische Chemie, Göttingen, West Germany

14.15 SUDDEN DECREASE IN CEREBELLAR GABA BINDING INDUCED BY STRESS
G. Biggio, G. De Montis, M.G. Corda and **G.L. Gessa,** Institute of Pharmacology, University of Cagliari, Italy

14.30 GABA AND PICROTOXININ RECEPTORS IN NEUROBLASTOMA CELLS
R.W. Olsen and **C. Napias,** University of California, Riverside, USA

14.45 APPEARANCE AND REGULATION OF THE GLUTAMATE RECEPTOR IN THE CHICK EMBRYO OPTIC TECTUM
G. Ramirez, J. Gómez-Barriocanal and **S. Villa,** Centro de Biologia Molecular Universidad Autónoma de Madrid, Canto Blanco, Spain

OC20 — NEUROTRANSMITTER RECEPTORS IN THE N.S. (Continued)

15.00 DIFFERENCES BETWEEN THE SEROTONINERGIC RECEPTORS PRESENT IN THE SYNAPTOSOMAL AND IN THE GLIAL MEMBRANES
G. Fillion, D. Beaudoin, J.C. Rouselle, M.P. Fillion and **J. Jacob,** Institut Pasteur, Pharmacologie, Paris, France

15.15 AGONISTS AND ANTAGONISTS ON 2 TYPES OF DOPAMINE RECEPTORS IN THE MESOLIMBIC SYSTEM OF THE RAT
J. Offermeier and **J.M. Van Rooyen,** Dept. of Pharmacology, Potchefstroom University, South Africa

15.30 Coffee Break

16.00 PROPERTIES OF SOLUBILIZED BENZODIAZEPINE RECEPTORS
M. Gavish and **S.H. Snyder,** Depts. of *Pharmacology and Experimental* Therapeutics and Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, Baltimore, MD, USA

16.15 THE HYPOTHALAMIC OESTROGEN RECEPTOR: A ROLE FOR UNOCCUPIED NUCLEAR RECEPTORS
L. Lim and **J.O. White,** Dept. of Neurochemistry, Institute of Neurology, London, UK

16.30 PRESYNAPTIC MODULATION BY GABA AUTORECEPTORS AND DOPAMINE PRESYNAPTIC RECEPTORS OF THE K^+-EVOKED RELEASE OF ^{3}H-GABA FROM THE RAT SUBSTANTIA NIGRA
S. Arbilla, L. Kamal and **S.Z. Langer,** Dept. of Biology Synthélabo (L.E.R.S.), Paris, France

THURSDAY, SEPTEMBER 6, 1979

13.30—18.00 **Hall D**

ORAL COMMUNICATION SESSION — OC21

NEUROCHEMICAL ASPECTS OF DEVELOPMENT IN THE N.S.

Chairman: **E.M. Shooter**, USA

13.30 CONCURRENT DEVELOPMENT OF ($Na^+ + K^+$)-ATPase AND ITS PUTATIVE PARTIAL REACTIONS IN RAT FOREBRAIN AND HINDBRAIN. CORRELATION WITH MEASURED BRAIN [Na^+] AND [K^+] AND PROPOSED TEMPORAL RELATIONSHIP TO PROLIFERATION OF FINE CELLULAR PROCESSES
J.M. Bertoni and **G.J. Siegel***, Division of Neurology, The University of Texas, Health Science Center at San Antonio and *The University of Michigan, Ann Arbor, USA

13.45 BRAIN DEVELOPMENTAL PATTERN OF Na^+-K^+-ATPase ACTIVITY IN EARLY MALNOURISHED RATS TREATED WITH QUIPAZINE
J.R. Hernandez, Dept. of Neurosciences, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico D.F.

14.00 POSTNATAL SYNAPTOGENESIS AND MYELINOGENESIS OF THE CA1 REGION OF RAT HIPPOCAMPUS: A QUANTITATIVE HISTOCHEMICAL STUDY
S.T. DeKosky, G. Polites and **N.H. Bass,** Dept. of Neurology, University of Virginia School of Medicine, Charlottesville, USA

14.15 NEURONAL SURFACE ANTIGENIC MARKERS REVEALED BY RABBIT ANTI-MOUSE C1300 NEUROBLASTOMA SERA
Y. Berwald-Netter and **A. Koulakoff,** Biochimie. Cellulaire. College de France, Paris, France

OC21 — NEUROCHEMICAL ASPECTS OF DEVELOPMENT IN THE N.S. (Continued)

14.30 SELECTIVE LOSS OF AMINERGIC RECEPTORS WITH AGING AND PHARMACOLOGICAL CHARACTERIZATION OF 3H-SPIROPERIDOL BINDING IN RABBIT STRIATUM AND CORTEX
L.J. Thal, S.G. Horowitz and **M.H. Makman,** Albert Einstein College of Medicine, Bronx, NY, USA

14.45 NEONATAL HORMONE TREATMENT ALTERS THE MATURATION OF NORADRENERGIC INNERVATION OF THE RAT PINEAL GLAND
A. Yuwiler and **G.L. Brammer,** Neurobiochemistry Research, VAMC Brentwood, Los Angeles and Dept. of Psychiatry and Biobehavioral Sciences, UCLA, CA, USA

15.00 ACID MUCOPOLYSACCHARIDES DURING RAT BRAIN DEVELOPMENT
M. Rusic, M. Levental and **Lj. Rakic,** Institute for Biological Research, Belgrade, Yugoslavia

15.15 NEUROHUMOURS AND CELL PROLIFERATION IN THE DEVELOPING BRAIN: EFFECT OF LYSERGIC ACID DIETHYLAMIDE (LSD)
O. Barochovsky, A.J. Patel and **R. Balazs,** MRC Developmental Neurobiology Unit, London, UK

15.30 Coffee Break

16.00 ORNITHINE DECARBOXYLASE (ODC) ACTIVITY IN THE RAT SUPERIOR CERVICAL GANGLION (SCG): RAPID CHANGES FOLLOWING AXONAL INJURY
G.M. Gilad and **I.J. Kopin,** National Institute of Mental Health, Bethesda, MD, USA

16.15 HEAD CIRCUMFERENCE/BODY WEIGHT RATIO: A DEVELOPMENTAL INDEX FOR BRAIN MATURITY IN NORMAL AND INTRAUTERINE GROWTH RETARDED (IUGR) RABBITS
S. Harel, Y. Barak, I. Binderman and **E. Yavin*,** Municipal-Governmental Medical Center, Sackler School of Medicine, Tel Aviv University and Dept. of Neurobiology*, The Weizmann Institute of Science, Rehovot, Israel

THURSDAY, SEPTEMBER 6, 1979

16.00—18.00 **Hall C**

ROUND TABLE — RT6

PEPTIDES AND BEHAVIOR: BIOCHEMICAL CORRELATES*

Organizers: **D. Samuel**, Israel
D. de Wied, Netherlands

Participants: **W.H. Gispen**, Netherlands
V.E. Shashuoa, USA
M.E. Celis, Argentina
I. Karplus, Israel

16.00—18.00 **Hall E**

ROUND TABLE — RT7

MICROANALYTICAL TECHNIQUES AND TRACE COMPONENTS OF BRAIN*

Organizers: **V. Neuhoff**, West Germany
A. Boulton, Canada

It is the aim of this Round Table to avoid a fixed program with invited participants as is usually the rule. This will prevent the Round Table developing into a mini symposium. An attempt will be to maximize free interchange and discussion.

Persons interested in giving a presentation (of about 10 minutes) at this Round Table are invited to contact the chairpersons before, or during the meeting.

* A synopsis of this Round Table appears in the Abstract Book.

THURSDAY, SEPTEMBER 6, 1979

16.00—18.00 Hall F

ROUND TABLE — RT8

NEUROTOXINS FOR NEOPHYTES*

Organizer: **P. McGeer**, Canada

Participants: **N. Schechter**, USA
F. Clementi, Italy
E. Egana, Chile
S. Fuchs, Israel
C.-Y. Lee, Taiwan
P. McGeer, Canada

16.00—18.00 Hall G

ROUND TABLE — RT9

APPROACHES TO THE CHEMOTHERAPY OF DEMYELINATING DISEASES*

Organizer: **W. Moore**, Australia

Participants: **R. Arnon**, Israel
P.R. Carnegie, Australia
A.N. Davison, UK
E.H. Eylar, Canada
G.A. Hashim, USA
M. Kies, USA
W.J. Moore Australia
W.T. Norton, USA
M.E. Smith, USA

* A synopsis of this Round Table appears in the Abstract Book.

7. 日本学術会議第79回総会報告（第11期・第6回・昭和55.4.23～25）

日本学術会議第７９回総会は，４月２３日から同講堂において開催された。９時４０分開会が宣せられ，会長は冒頭，今期の最終年度を迎え，われわれの手で何等かの責務を果たし得たという満足を得られるよう努力を望むと述べたのち，新任の次長，学術部長を紹介した。会長報告では，一般的な報告のほか，追加報告として，第１２期に向けての委員会整備等の予備的検討委員会を，運営審議会付置小委員会として設置したことが述べられた。

原子力政策に関する連絡会議報告では，原子力安全委員会との共済学術シンポジウムをめぐる新聞等の報道について，誤った理解や解釈がみうけられたので，これを正す措置などをとったことが報告され了承された。科学技術会議報告ではライフサイエンス，防災，エネルギー，海洋開発などが主な議題としてとりあげられていることが報告された。次いで運営審議会付置小委員会報告に移り，日本学術振興会，広報，改革検討，第１１期報告書作成，財務，国際会議主催等検討，勧告等，沖縄学術連絡の各委員会報告が行われた。

引続いて行われた各部報告では，第５部長からの工学学士院構想の報告が注目された。

午後の常置委員会報告では，国際学術交流，科学者の地位，学術体制，研究費，科学研究計画，学問・思想の自由各委員会の報告に関連して，官公庁文書の公開・利用の問題につき，会員から活発な意見が述べられた。

午後の後半は特別委員会報告に移り，科学振興基本問題特委の報告ののち，発展途上国学術協力問題，国公立研究機関問題，学術情報生産・流通問題，災害問題の各特別委員会報告については，それぞれ活発な意見が会員から出された。若干の報告項目を翌日に残して１６時５５分第１日目の会議を終了した。

２日目の２４日は午前１０時に開会。前日に引き続き環境・健康問題，食糧需給問題，エネルギー・資源開発問題，原子力平和問題，国際協力事業の各特別委員会の報告が行われた。つぎに中央選挙管理会から有権者について，前期以来の継続者約１７９,０００名，新規登録者４９,０００名計約２２８,０００名，前期よりも２０,０００名余り増加するとの報告があった。その後，国際学術交流委から「学術に関する国際団体への加入基準」(案)，食糧需給問題特委から「食糧自給力の向上」の２件についてそれぞれ説明があり，会員の意見が求められた。前者は現行規定では不十分な加入基準と手続きとを明確にしようとするものである。後者は米を我が国の食糧の中心とすべきことを科学的見地から強調したもので，今総会において勧告として提案される予定であったが，会員の意見を聞いて内容・体裁を整備し，秋の総会に提案することとなった。

午後は以下５件の提案について審議採決が行われた。まず学術体制委からの「私立大学に対する国庫助成の改善・増額について」，学術情報生産・流通問題特委からの「文書館法の制定について」の勧告を採択。後者に関しては統計・調査資料を含むこと，図書館との有機的な連繋を保つことなどの意見が述べられた。ついで第４部及びＩＵＢＳ研連から「系統生物学研究所（仮称）の設置について」，第４部，第５部，災害問題特委，地球物理学研連，地震工学研連の共同提案「高密度強震観測の推進について」の２勧告を採択した。このうち後者は強震地動国際高密度観測会議が決定した国際協力計画の国内における推進について，必要な予算措置を講ずることを政府に求めるものである。最後に科学振興基本問題特委から提案された１９６２年以来の懸案であった「科学者憲章について」（声明）が採択された。

３日目の２５日は定足数の関係で開会に先立ち午前９時４３分から当日の日程として予定されていた「科学と政治について」のフリートーキングが行われた。高柳会員から学術会議が政治的問題をとりあげることをめぐっての過去の記録にもとづく見解の紹介，また

学術会議として必ずしも一貫した力場がとられていなかったことの指摘，今後これについての見解を明確にする必要がある旨の指摘が行われた。これに対して伏見会長はじめ多数の会員から意見が述べられた。

１０時４３分開発が宣せられた。ラッセル・アインシュタイン宣言２５周年についての声明とその普及についての申合せ，「日本学術会議会長等互選に関する内規について」，「環境影響評価制度が立法化される場合の措置について」（申合せ）がそれぞれ賛成多数をもって承認され，午前１１時５０分３日間に亘る総会を終了した。

なお本総会の出席率は，１日目８８％，２日目９０％，３日目８６％であった。

8. 日本学術会議第１２期会員選挙について

昭和５５年１１月には，３年に１度の日本学術会議会員選挙が行われます。

この選挙は，会員を選挙する方も有権者でなければなりませんので，次のことに御留意ください。

(1) 新たに有権者としての登録を希望する方は，登録用カードを早めに提出してください。

(2) 引き続き有権者の方は住所，勤務機関，勤務地等登録カード記載事項に変更があった場合は，すみやかに異動届を提出してください。

以上について不明の点がありましたら，下記にお問い合せください。

〒108 東京都港区六本木７-２２-３４
日本学術会議会員選挙管理事務所
☎03-403-6291

9. 日本神経化学会理事改選のお知らせ

日本神経化学会会則に従い，昭和５５年１１月に理事の改選を郵便投票により行います。

日程につきましては次号（事務局報〔11〕）に公示致します。

日本神経化学会会則

昭和51年10月

日本神経化学会会則

（昭和41年10月 8日制定）
（昭和45年10月17日改正）
（昭和50年11月15日改正）
（昭和51年10月16日改正）

第1章 総 則

第1条 本会は日本神経化学会（The Japanese Neurochemical Society）という。

第2条 本会の事務所を東京都新宿区信濃町35番地慶応義塾大学医学部生理学教室内におく。

第3条 本会は理事会の議決を経て必要の地に支部をおくことができる。

第2章 目的および事業

第4条 本会は会員の研究発表，知識の交換ならびに会員相互間および国内外の関連機関との連絡提携の場として神経化学ならびに関連領域の発展を促しもって学術文化の進歩に寄与することを目的とする。

第5条 前条の目的を達成するために次の事業を行なう。

1. 研究発表および講演会の開催
2. 会誌，研究報告および資料の刊行
3. 国内外の関連機関との連絡および協力
4. その他目的を達するために必要な事業

第3章 会 員

第6条 本会の会員は次のとおりとする。

1. 正会員：神経化学に関する学識または経験を有するもので本会の目的に賛同し，会費年額2,500円を納める者。
2. 名誉会員：本会に特に功労のあった正会員（外国人は正会員であることを要しない）のうちから総会の議決をもって推薦する者。ただし名誉会員は会費を納めることを必要としない。
3. 団体会員：本会の目的に賛同し会費年額2,500円を納める団体（図書額を含む）
4. 賛助会員：本会の事業を後援し，会費年額10,000円以上を納める者または団体
5. 学生会員：大学またはこれに準ずる学校（大学院を含まず）に在籍し，神経化学に関係ある学科を修める学生であって，本会の目的に賛同し会費年額1500円を納める者。

第7条 会員になろうとする者は正会員の推薦により細則に示す様式に従い会費を添えて入会申込書を事務局に提出し理事長の承認を受けなければならない。

第8条 会員は毎年開かれる研究発表会に演題の申込みをすることができる。

第9条 会員は本会が刊行する機関誌「神経化学」および図書の優先的配付を受けることが出来る。

第10条 会員は第6条に規定する会費を納入しなければならない。

第11条 会員は次の事由によって資格を喪失する。

1. 退 会
2. 死 亡
3. 除 名

第12条 会員で退会しようとするものは，退会届を提出しなければならない。

第13条 会員が次の各号の一に該当するときは，理事会の議決を経て除名される。

1. 会費を滞納したとき
2. 本会の名誉を傷つけ，また会員としての義務に反したとき

第14条 既納の会費は，いかなる理由があってもこれを返還しない。

第4章 役員，評議員および職員

第15条 本会に次の役員をおく

理 事	15名
監 事	2名
世話人代表	1名

第16条 理事および監事は細則の定める方法に従って正会員から選出する。理事は互選で理事長1名，常務理事1名を定める。

第17条 理事長は本会の業務を総理し，本会を代

表する。

2. 常務理事は理事長を補佐し，理事会の決議に基づき日常の業務に従事し，総会の決議した事項を処理する。

3. 常務理事は理事長事故のあるときはその職務を代行する。

第18条 理事は，理事会を組織し，会則に定めるもののほか，本会の総会の権限に属せしめられた事項以外の事項を議決し執行する。

第19条 監事は民法第59条に準じてその職務を行なう。

第20条 本会の役員の任期は4年として再任を妨げない。

2. 補欠による役員の任期は，前任者または現任者の残任期間とする。

3. 役員は，その任期満了後でも後任者が就任するまでは，なおその職務を行なう。

4. 役員は本会の役員としてふさわしくない行為のあった場合，または特別の事情のある場合には，その任期中であっても総会および理事会の議決により，理事長がこれを解任することができる。

第21条 本会に評議員をおく。

2. 評議員の定数は50名乃至100名とする。

3. 評議員は正会員中から総会において選任する。

4. 理事はその任期中は評議員となる。

第22条 評議員には第20条の規定を準用する。

第23条 評議員は評議員会を組織し，本会の運営上の重要事項について理事会の諮問に応ずるものとする。

第24条 本会の事務を処理するため職員をおく。

2. 職員は理事長が任免し理事会の承認をうける。

3. 職員は有給とすることが出来る。

第5章 会 議

第25条 理事会は毎年二回理事長が招集する。ただし理事長が必要と認めた場合，或いは理事現在数の三分の一以上から会議の目的たる事項を示して請求のあったときは，理事長は臨時理事会を招集しなければならない。

第26条 理事会は理事現在数の五分の三以上出席しなければ議事を開き議決することは出来ない。ただし委任状を提出したものは出席者とみなす。

2. 理事会の議事は理事会の過半数をもって決し，可否同数のときは議長の決するところによる。

第27条 通常総会および研究発表会の相当機関（施設）は理事会において指定する。

2. 当該機関の会員は研究発表会の開催に関し，世話人会を組織する。世話人会の互選により世話人代表1名を指名する。

3. 世話人代表はその年度中理事となる。

第28条 通常総会は毎年一回研究発表会の際，理事長が招集する。

2. 臨時総会は理事会または監事が必要と認めたとき，いつでも招集することができる。

第29条 通常総会の議長は世話人代表とし，臨時総会の議長は会議のつど会員の互選で定める。

第30条 総会の招集は少なくとも10日以前にその会議すべき事項，日時および場所を記載した書面または会誌の広告をもって通知する。

第31条 次の事項は，通常総会に提出しその承認を受けなければならない。

1. 事業計画および収支予算についての事項

2. 事業報告および収支決算についての事項

3. その他理事会において必要と認めた事項

第32条 総会は，会員現在数の十分の一以上出席しなければその議事を開き議決することが出来ない。ただし当該議事につき委任状を提出したものは出席者とみなす。

第33条 総会の議事は出席者の過半数をもって決し，可否同数のときは議長の決するところによる。

第34条 総会の議事の要項および議決した事項は会員に通知する。

第35条 評議員会は随時理事長が招集する。

評議員会の議長は理事長がこれに当る。

第36条 評議員会は評議員現在数の五分の一以上出席しなければ会議を開くことが出来ない。ただし委任状を提出したものは出席者とみなす。

第37条 総会，理事会および評議員会の議事録は議長が作成し理事長が保管する。

第6章 会　　計

第38条 本会の事業遂行に要する費用は，会費，事業に伴う収入をもって支弁する。

第39条 本会の収支決算は毎年会計年度が終了後理事長が作成し，監事の意見をつけ理事会および総会の承認を受けなければならない。

第40条 本会の会計年度は毎年9月1日に始まり8月31日迄とする。

第7章 会則の変更

第41条 この会則は理事会および総会においておのおの三分の二以上の賛成決議を経て変更することが出来る。

第8章 補　　則

第42条 この会則施行についての細則は，理事会および総会の議決を経て別に定める。

第9章 付　　則

第43条 新総会発足以前の役員，評議員は現神経化学懇話会常任委員及び委員により代行される。

第44条 現会員はそのまま本会の会員となる。

日本神経化学会細則

（昭和41年10月　制定）
（昭和51年10月16日改正）

第1章　会　員

第1条 本会に会員として入会を希望する者は入会申込書に次のことがらを記入して事務局に提出しなければならない。

1. 姓名（ローマ字読み方付）生年月日
2. 推薦者氏名印
3. 最終出身校，学科名および卒業年次，ただし学生会員は入学年月と卒業または終了予定年月，を記入しなければならない。
4. 勤務先とその所在地および勤務先での地位
5. 会員の現住所ならびに連絡先住所
6. 専門分野，専攻科名

第2章　役員，評議員

第2条 理事定数15名のうち12名は第3条及び第4条に定める方法に従い，会員の直接選挙により選出する。残り3名は評議員会の議を経て委嘱する。

第3条 理事の選挙に当って選挙管理委員会を設け理事長が委嘱する。選挙管理委員会は理事選挙要項に従い事務局の所在地で選挙事務を行う。

第4条 理事選挙要項は下記の如くする。

1. 選挙管理委員会は事前に会員名簿を作成して「神経化学」に掲載する。理事の選挙権及び被選挙権は投票締切日の6カ月以前に正会員となったものに限る。
2. 正会員で選挙事務に異議あるものは投票締切日の10日前までに選挙管理委員会に申し出なければならない。
3. 選挙管理委員会は正会員2名以上の推薦のあった正会員，および評議員をもって理事候補者名簿を作成し会員に配布し，投票の資料とする。
4. 投票は選挙管理委員会の定める投票用紙をもって行い無記名5名以内の連記とする。
5. 投票は原則として郵送をもって行う。
6. 当選者は得票数の多い上位から12名を決定する。同票の場合は年令順とする。但し各領域，各研究者層の意見が反映される様，専門別を考慮して次の規定を設ける。基礎（医・理・薬を含む）臨床各5名が含まれる得票数上位より決定する。
7. 当選者が辞退し，又は選挙終了後1年未満の期間内に理事に欠員を生じた場合は得票数及び専門別を考慮して理事会において補充を決定する。
8. 選挙後1年以上経過した後理事に欠員を生じた場合は補充を行なわない。但し3名以上の欠員を生じた場合は6ケ月以内に補充選挙を行うものとする。
9. 開票は選挙管理委員が会員の中から委嘱した立会人のもとに行う。ただし会員は誰でも開票に立会うことが出来る。

第5条 理事長，常務理事は理事会の互選により決める。

第6条 評議員は次の方法により選出する。
理事会は正会員から推薦された評議員候補者について審査を行い適格者は総会において選任される。評議員の推薦にあたっては，研究歴満5年以上のもので地域別，専門別について考慮される。

第7条 監事の選出については理事会が理事以外の正会員の中から候補者を選び総会の承認を経て理事長が委嘱する。

第3章　事　業

第8条 機関誌「神経化学」の編集委員は理事会の承認を得て理事長より委嘱する。

第9条 機関誌の英文名は「Bulletin of The Japanese Neurochemical Society」とする。

第10条 本会の目的を達成するため理事会が必要と認めた時会員の中から専門委員を委嘱することがある。

目　次

1．理事会議事録…… 1
2．評議員会議事録…… 3
3．総会議事録…… 4
4．第22回日本神経化学会プログラム編成委員会報告…… 4
5．第22回日本神経化学会プログラム…… 5
6．第7回国際神経化学会議（イスラエル）プログラム…… 11
7．日本学術会議第79回総会報告……109
8．日本学術会議第12期会員選挙について……110
9．日本神経化学会理事改選のお知らせ……110