

**ANNUAL REPORT: DIVISION OF
INTRAMURAL RESEARCH PROGRAMS
NATIONAL INSTITUTE OF
MENTAL HEALTH. OCTOBER 1, 1983 -
SEPTEMBER 30, 1984; VOL. 1, SUMMARY
STATEMENTS**

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TABLE OF CONTENTS

VOLUME I SUMMARY STATEMENTS

	<u>Page</u>
Director, Division of Intramural Research Programs.....	1
Biological Psychiatry Branch.....	7
Clinical Neuropharmacology Branch.....	19
Clinical Psychobiology Branch.....	25
Laboratory of Clinical Science.....	37
Clinical Neuroscience Branch.....	49
Laboratory of Neuropsychology.....	59
Laboratory of Developmental Psychology.....	75
Laboratory of Psychology & Psychopathology.....	83
Laboratory of Socio-Environmental Studies.....	99
Laboratory of Cell Biology.....	115
Laboratory of Brain Evolution & Behavior.....	119
Laboratory of Cerebral Metabolism.....	123
Laboratory of General & Comparative Biochemistry.....	129
Laboratory of Neurobiology.....	131
Laboratory of Neurochemistry.....	135

	<u>Page</u>
Laboratory of Neurophysiology.....	137
Research Services Branch.....	147
Program at St. Elizabeths Hospital.....	157
Adult Psychiatry Branch.....	159
Laboratory of Preclinical Pharmacology.....	161

ANNUAL REPORT
of the
DIRECTOR, DIVISION OF INTRAMURAL RESEARCH PROGRAMS
October 1, 1983 - September 30, 1984
Frederick K. Goodwin, MD

This, my third annual report as Scientific Director, covers a period of relative stability for the Intramural Program, following the earlier upheavals associated with our reorganization. On the other hand, leadership at both the ADAMHA and Institute levels was in transition during this year. The prolonged uncertainty has now ended happily with the selection in June of Dr. Donald Macdonald as ADAMHA Administrator and in September of Dr. Shervert Frazier as NIMH Director.

Soon after his arrival last Spring, Dr. Macdonald immersed himself in the Substance of Intramural research, with three lengthy scientific briefings and many informal contacts. His easy rapport with investigators and quick grasp of research issues has been impressive and we wish him well in his stewardship of this major health agency.

The appointment of Dr. Frazier, formerly Professor of Psychiatry at Harvard, and the departure of his predecessor Dr. Herbert Pardes to become Professor and Chairman of Psychiatry at Columbia, underscores the strong ties between our Institute and the academic community. As Director of Harvard's McLean Hospital, Dr. Frazier helped to build a distinguished research facility headed by Dr. Seymour Kety (now IRP Associate Director for Basic Science). Seymour will attest to his old -- and new -- boss's prowess as a research advocate. We are looking forward to welcoming Dr. Frazier to the IRP and to familiarizing him with our work.

One of Dr. Macdonald's first official functions as Administrator Designate was to address our IRP banquet honoring Dr. Julius Axelrod on June 1. Julie officially retired from Federal service this year, but is continuing his research as a guest worker in Dr. Mike Brownstein's Laboratory of Cell Biology. The banquet culminated a memorable two-day symposium on "Mechanisms of Synaptic Regulation," which brought together hundreds of Julie's associates from around the world to share findings and celebrate the remarkable career of NIMH's Nobel Laureate. The banquet brought together scientific and science policy leaders with Julie's friends and colleagues, old and new. Policy Leaders in attendance included Assistant Secretary of Health Dr. Ed Brandt, Assistant Secretary for Personnel Tom McFee (who delivered a special citation from Secretary Heckler), White House Science Advisor Dr. George Keyworth, Senator Thomas Eagleton and Congressman Stenny Hoyer. The whole affair -- from program substance to travel logistics to menu planning -- was tastefully and meticulously orchestrated by Dr. Marty Zatz. Underwritten by Intramural funds and individual and corporate contributions, the Axelrod event spotlighted the Intramural Program's science and values for health leadership throughout the Government. Dr. Keyworth and his aide, Bernadine Bulkley, showed a keen interest in the Program during subsequent briefings on campus.

Following in the same tradition of excellence personified by Julie Axelrod is a distinguished group of Intramural staff members who received major awards

over the past year. These include Dr. Mortimer Mishkin, who became our eighth member of the National Academy of Sciences; Dr. Edward Evarts, the SES Presidential Meritorious Executive Rank Award; Dr. Seymour Kety, the first American ever to win West Germany's Golden Kraepelin Medal, and also the first recipient of Japan's new Mihara Foundation Award; Dr. Richard Wyatt, the American College of Neuropsychopharmacology's Daniel Efron Award; Dr. Erminio Costa, Italy's Gold Medal for outstanding cultural contributions; Dr. Philip Gold, the C.P. Richter Prize in Psychoneuroendocrinology; Dr. John Morihisa, the A.E. Bennett Neuropsychiatric Research Foundation Award; Dr. Carmi Schooler, election to membership in the Sociological Research Association; Dr. Melvin Kohn, election to Fellow status in the American Association for the Advancement of Science; Dr. Giulio Cantoni, the DHHS Distinguished Service Award; Dr. Theodore Colburn, the PHS Superior Service Award; and Dr. Thomas Wehr, the PHS Meritorious Service Medal. I was indeed honored to receive the first Distinguished Alumni Award from the Department of Psychiatry at the University of North Carolina.

Deserving of special mention has been Dr. John Eberhart's remarkable recovery this past year. It has indeed been inspiring to see our former director's indomitable spirit and perseverance buoy him through a 10-month siege of a rare, serious illness here at the Clinical Center. We all celebrate his return home and look forward to his speedy return to duties in the NIH Director's office, where John's presence symbolizes the close ties between our program and the greater NIH community.

Since succeeding John as NIMH Scientific Director, I have attempted to make the most of what we have through reorganizing units, shifting personnel, and re-allocating space -- all within the constraints of existing resources. The space realignments, now completed, have been carried out according to the principle of equity and couldn't have been accomplished without the cooperation of the lab/branch chiefs and the tireless efforts of Drs. Ted Colburn and Bill Potter.

Dr. Mike Brownstein's Laboratory of Cell Biology (LCB) has moved from Building 10 to Building 36, enlarging our critical mass of basic neuroscientists in that building. A new Laboratory of Molecular Biology, headed by Dr. David Neville, brings together his section with those of Drs. Howard Nash and Werner Klee. This unites a group of first class scientists working in closely related areas of molecular genetics, membrane biology and structure and function of receptors.

Leaving the Laboratory of General and Comparative Biochemistry and moving to Building 10 this year is Carl Merrill's section, which joins the Clinical Psychogenetics Branch, strengthening its ability to conduct coordinated clinical and basic research.

Among major organizational changes, the Laboratory of Clinical Science, now under Dr. Dennis Murphy, has incorporated Dennis' old Neuropharmacology Branch, making the LCS again our largest lab. In recognition of her unquestioned position at the forefront of research in child psychiatry, Dr. Judy Rapoport has been elevated to chief of a new Child Psychiatry Branch, with remodeled quarters on the 6th floor of the Clinical Center.

Development of our joint NICHD/NIMH primate facility at Poolesville is progressing, with the first group of Dr. Steve Suomi's rhesus monkeys

having arrived from Wisconsin last spring. Opening of a naturalistic, 5-acre outdoor habitat was marked by a brief ceremony and press briefing in early June. Construction continues on the indoor monkey facility. Dr. Thomas Insel, coordinator of the NIMH component is, among other things, raising a colony of tiny marmoset monkeys for studies at the Poolesville center. Other campus-based NIMH investigators who are taking advantage of the Poolesville resource include Drs. Jacqueline Crowley, Thomas Uhde, John Glowa, Sidney Werkman and James Hill.

Dr. Paul MacLean, the real "father" of our Poolesville facility, has joined the Laboratory of Clinical Science as a senior scientist but will remain in Poolesville as a senior advisor to our scientists and those of NICHD. Dr. Ichiji Tasaki has become a senior scientist in Dr. Ewart's Laboratory of Neurophysiology.

Unfortunately, even efficient management of resources cannot entirely make up for the erosion in financial and personnel support the Intramural Program has suffered over the past decade and a half. In 1968, our full-time permanent ceiling was cut by 100 and this year we lost 29 positions. Yet during this same period, growth in the brain sciences and in techniques for translating this new knowledge into clinical insights has been unprecedented. The Intramural Program's true discretionary monies, the "other objects" funds that support research, have chronically been only 60% of the average for NIH Institutes of comparable size. The formula determining NIMH's contribution to the NIH Management Fund has for years inadvertently resulted in the NIMH bearing about \$2 million dollars more than its share of the NIH's "overhead" costs, largely for the support of the Clinical Center. Fortunately, this formula is now under revision and is expected to reflect more realistic cost estimates in future years. An ostensible \$3.7 million budget increase in FY 1983, upon closer examination, turns out to be spurious; a bookkeeping change simply shifted the budget for the overhead costs of our program at Saint Elizabeths Hospital from the NIMH Director's Office to the Intramural Program.

Of course, parallel discrepancies between NIMH and the NIH Institutes are similarly conspicuous in extramural grant funded research. Mental health research as a whole has yet to recover from the funding doldrums of the 1970's. We will need an infusion of new resources if we are to seize the opportunities arising in neuroscience and keep pace with the increasing costs of research technologies.

Positron Emission Tomography represents a prime example. Our new \$1.7 million PET scanner is scheduled to be completed this Spring. Drs. Richard Coppola and Robert Cohen, who have been overseeing this project, plan to check out our unit, the prototype of a unique 4-ring design, at the Scandatronix factory in Sweden prior to shipment. We have contributed significantly to the NIH acquisition of the cyclotron needed to efficiently utilize the PET scanner, which is also due to arrive here this Spring. We have similarly helped to finance the Clinical Center's Nuclear Magnetic Resonance scanning facility. I have initiated negotiations with the NIH Nuclear Medicine and Radiology Departments to insure an equitable distribution of both PET and NMR resources, based on each Institute's individual contributions.

Several new positions and other resources will also be required to create

our planned Laboratory of Molecular Genetics. As I mentioned last year, this new field offers an unprecedented opportunity to advance our understanding of the brain. Similarly, initiatives in the area of behavioral medicine -- beyond just providing psychiatric consultation to NIH Institutes -- could become possible next year if the budget provides new resources.

This year, our Intramural Program has become eligible to participate in the Research Service Act fellowship program designed to train young physicians who might not otherwise pursue research careers.

A whole cast of current and former Intramural scientists -- as well as a number of our patients -- were featured on public television for eight weeks this Fall as part of the excellent WNET Brain Series, which was funded in part by NIMH. These include Drs. Mort Mishkin, Tom O'Donohue, Norm Rosenthal, Tom Wehr, Lew Bigelow, Frank Putnam and Danny Weinberger. A major portion of the program on "Madness" was filmed at our Saint Elizabeths Program.

The possibility of a major change in that Program surfaced over the past year, with word that Dr. Erminio Costa has been asked to head a proposed new neuroscience institute at Georgetown University. Fidia, Inc., a non-profit U.S. affiliate of Fidia Pharmaceuticals, Italy, would be underwriting this joint venture, which could also attract several other Laboratory of Preclinical Pharmacology scientists. Meanwhile, Congress this year passed legislation setting a timetable for the transfer of Saint Elizabeths Hospital to the District of Columbia by 1989, giving further imminence to decisions regarding the future of our clinical program at the Hospital. Prospects for relocating parts of our Saint Elizabeths programs on the NIH campus dimmed this year when planning funds were stricken from the budget for construction of a new building on the NIH campus. Among several options now under consideration is the possibility of NIMH leasing space in the proposed Fidia building at Georgetown. Dr. Norton Neff ended a long and productive career at the LPP this year to become professor and chairman of Pharmacology at Ohio State University.

Dr. Richard Wyatt's Neuropsychiatry (formerly Adult Psychiatry) Branch at Saint Elizabeths has just undergone a review by our Board of Scientific Counselors at this writing. Being able to tap the Board's expertise has been especially helpful at this time as important decisions concerning that program's future must be addressed.

Over the past year, the Board reported on its review of the methodologically sophisticated Laboratory of Socioenvironmental studies and the new Laboratory of Cell Biology -- the latter being largely a prospective review. The Board's report on the Clinical Neuropharmacology Branch (now within the Laboratory of Clinical Science) cited the remarkable amount of work accomplished with limited resources.

Last year, the Board awarded the orphaned Clinical Infant Research Program at Adelphi high marks as a prevention services research and demonstration effort but found it out of place in Intramural Research. A more appropriate placement has now been arranged within the Health Resources and Services Administration, Division of Maternal and Child Health. The Institute has developed a cooperative agreement with HRSA to ease this transition and