The Capital Times

Balance life with the arts

Creating a strong cultural future for this community, indeed for the whole nation, involves some of the same elements as creating a piece of music or a beautiful picture or a compelling drama.

True, there can be a place for minimalist art or the one-person performance. For the most part, though, it takes a mixture of notes or colors or voices to transform an idea in a creative person's mind into a work that can enrich others' lives.

So, too, it takes a mixture of national and local efforts, public and private funds, people and bricks and mortar to create a vibrant cultural life.

AGENDA 97

Strengthen the arts downtown

The President's Committee on the Arts and Humanities provided a timely reminder of that this week with its call for a "national millennium initiative" to inspire artists and mobilize public and private support.

Over the past decade, ideological battles over public funding for the arts as well as struggles to balance the federal budget have hurt national funding. Some money-strapped school districts have put programs in art and music on the chopping block. Libraries all over the country have cut back hours or closed branches.

The president's commission hopes to create some badly needed momentum in the other direction. That's important for the nation. Closer to home, it's important to Dane County.

On one level, this area has one of the nation's models in public/private arts partnerships that really nurture the grass roots. The Dane County Cultural Affairs Commission and its director, Lynne Eich, have worked for the past 20 years to leverage modest amounts of county tax money to raise far greater amounts of private money. The result is a cultural vitality that adds immeasurably to the quality of life here.

Now some civic leaders see an opportunity for large-scale projects that will solidify the cultural base for this area. Arts groups have described in detail the space crunch they now face in the limited venues downtown — this at a time when both participation and attendance are booming.

That's why we decided to give extra emphasis this year to strengthening the arts in downtown Madison by supporting efforts to create new venues for music, drama and art. These are the bricks and mortar elements that undergird the creative possibilities for so many people here. This is one part of the kind of initiative needed throughout the nation to make sure that we balance not only budgets, but also the elements of civic life. Culture is one of those vital elements.

cc: KMW

EXECUTIVE OFFICE OF THE PRESIDENT

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FACSIMILE COVER SHEET

DATE: 3-3

TO: Elena Kagan - 6-7431
Melissa Green - 6-2878

Fax Number: _____

Number of pages (including cover sheet): 6

FROM: Jeff

REMARKS: Paper for Tues's Head Start meeting

6:00 to graphics

FY 1997 HEAD START EXPANSION

Head Start currently serves 750,000 children. It is estimated that about 2 million children ages 3-4 are eligible, though some may already be served by child care or preschool, or their families may prefer home care. In order to help meet this need, the Administration sought and obtained funds to expand Head Start by 50,000 children in FY 1997 (to a total of 800,000 children) and to keep the Administration on track to expand Head Start to 1 million children by 2002. The funding available for this FY 1997 expansion is $227 million.

The traditional approach to Head Start expansion has been to fund part-day slots. In some cases grantees made arrangements to coordinate with child care providers. In other cases, they left this mostly to parents. HHS feels that in addition to providing a comprehensive set of high quality services for more children, Head Start will also increasingly need to respond to the child care needs of families who are working or seeking employment. A study of Head Start children found that, as long ago as 1990, 37% were also in some child care. New time limits and work requirements in welfare reform are expected to increase child care use among the nearly 50 percent of Head Start parents who currently receive cash assistance through TANF or AFDC.

HHS envisions the Head Start program of the future offering families a variety of services: part-day for those who need it and full-day through a variety of coordination arrangements, for those who need day-care. The mix of part-day and full-day slots would be much more balanced than is the case today. The Head Start expansion plan in the FY97 (and FY98) Budget, however, is based on the cost of adding part-day slots only.

In order to increase the number of full-day, full-year Head Start slots, HHS wants to support the coordinated application of Head Start funds and new child care funds, made available in welfare reform, and other state, local, and private funds to working families who need child care so that they can receive full-day Head Start services. The following are three options for how to use the Head Start expansion funds:

(1) HHS has proposed that priority in the use of new funds be given to grantees proposing partnerships with local child care providers and blending Head Start with other public and private funds to provide quality full-day/full-year Head Start services to new children and families. Part-day slots would be funded if grantees in an individual State did not propose such lots. Up to 50,000 new full-day slots, funded jointly by Head Start and child care, would be created under this option.

(2) A second option is to fund part-day slots through

competitive grants, while building on existing local coordination between Head Start and child care services in order to allow both to serve children with as little disruption as possible. Because the children that need additional child care would enroll in child care programs, without any additional contribution from Head Start, OMB believes the average cost per child may be lower than in option 1. Thus, OMB believes the combination of Head Start and child care funds will be likely to make some form of out-of home care available to more children under this option. HHS disagrees, citing the potential under option 1 of bringing additional local and private funds into partnership arrangements, and creating more cost-effective staffing and service strategies under partnerships which could result in net equal or greater numbers of children receiving services under option 1.

(3) The third option would allow local grantees to decide how they want to spend their expansion funds. HHS could not guarantee the number of new part-day and full-day slots that would be created.

Under all 3 options, expansion funds will be awarded through a competitive process, with eligibility limited to current Head Start grantees. The following are some of the pros and cons for each of the three options for the use of expansion funds:

1. HHS Proposed Strategy: Expand Head Start through partnerships with local child care providers and blending Head Start funds with other child care, early childhood and private funds.

This approach would give funding priority to programs that create new full-day, full-year Head Start services by combining child care resources with Head Start funds and other public and private funds and creating partnerships between Head Start and other community agencies. Services would meet Head Start performance standards and serve new Head Start-eligible families. This approach allows grantees to create part-day slots from Head Start funds only as a second priority if grantees do not come forward with acceptable child care collaborations. HHS expects a wide variety of agreements and collaborations in different communities. This approach is strongly supported by the Secretary because it would guarantee the 50,000 slots and would respond to the needs of families, communities, and States.

Pro

- Could meet the goal of expansion to 50,000 additional children, while responding to the needs of working families for full-day services by using child care funds to meet a portion of the costs of high quality full-day, full-year services.

- The Administration could present the expansion as an initiative that brings programs together to help children get a Head Start in school readiness and help parents move from welfare to work. This option could make it easier for a working parent to enroll his or her child in head Start since the child would be able to stay there for the entire day.

- Could keep down costs charged to the national Head Start program by shifting other costs to the child care program.

- Could help States improve the quality of child care programs through collaboration with Head Start.

Con

- OMB is concerned that opponents of increased Head Start funding may argue that this option is not a "real" Head Start increase since they might view the expansion as converting child care slots to Head Start slots rather than creating new out-of-home care slots for children. Depending on the number of collaborations, the Head Start funds for new slots will merely supplement the cost of child care slots already being created instead of going to serve new Head Start eligibles. HHS disagrees because the announced purpose of the expansion will be to serve additional children and families; because local Head Start and child care agencies have waiting lists in many communities; because additional child care, Head Start, and prekindergarten program resources are being made available in many communities to expand program enrollment.

- Would require child care partners to meet Head Start standards for the full day on new slots, rather than allowing cheaper alternatives such as supplementing a Head Start development program with child care services. OMB is concerned that this is likely to increase the price of out-of-home care (counting all sources of funding) even as it seeks to increase quality. HHS disagrees, citing the potential of mobilizing additional private and community investment in collaborative strategies, as well as other cost-efficiencies under partnership modes.

- OMB is concerned that while this proposal only applies to new slots, it raises the question as to whether or not existing Head Start slots should be converted to full-day slots using child care funds. Such a policy would further reduce the child care resources available to reach unserved children.HHS disagrees because the process of awarding expansion funds is not related to grantees reconfiguring existing Head Start services. Further, HHS is committed to meeting the Administration's targets for increasing

enrollment in Head Start towards the goal of serving 1 million children by 2002 and will monitor refunding actions to ensure there is no net reduction in enrollment.

- OMB contends that it is not clear how often low quality child care providers would be interested; if few seek to enter into partnerships with Head Start grantees, this could yield marginal changes in good child care rather than substantial changes in poor child care. HHS believes that managers of lower quality child care have the strongest incentive to partner with Head Start to provide more effective and responsive services. In addition, current Head Start-child care partnerships involve child care centers and family child care homes at a variety of initial levels of quality and funding.

2. Option 2: Focus on creating new part-day slots and allow flexible coordination between local grantees and child care agencies.

This approach permits grantees to create more of the part-day services most Head Start children now receive, and encourages Head Start grantees and other child care providers to coordinate services in order to minimize disruptions in the transfer of children from head Start to day care (i.e. co-locate Head Stat and child care, improve transportation services). 66 percent of existing Head Start programs have already taken steps to collaborate with child care through various types of agreements with local child care programs.

Pro

- Could meet the 50,000 child expansion goal as well as child care needs of working Head Start families.

- Could focus on the needs of unserved children and families who are not currently receiving child care services.

- Could minimize costs allowing Head Start AND child care together to serve the maximum number of poor working families. Compared with the HHS recommended strategy, this option would be likely to serve more total children across Head Start and child care.

Con

- This option is not as seamless as HHS's proposed option of funding primarily full-day, full-year Head Start services. Working parents and Head Start centers might still need to put together multiple child care arrangements in order to keep a child in Head Start.

- This option does not address HHS's interest in rasing the

general quality of child care through coordination with Head Start.

- HHS contends this option would undercut the effectiveness of Head Start, because research suggests that children fare less well when subjected to multiple combinations of child care settings and relationships.

- HHS contends this option will intensify existing criticism of Head Start for failing to coordinate with and contribute to state and local child care, early childhood, and welfare reform programs and initiatives.

Option 3: Allow local grantees to provide any mix of part-day and full-day services.

This approach would allow grantees to decide whether to fund part-day or full-day slots with their Head Start expansion grants. When this was done in 1994, local grantees almost quadrupled the number of full-day slots (from 7000 to 27,000) while only increasing part-day slots by 7,000.

Pro

- Would provide maximum flexibility for local grantees in using expansion funds.

- Would realize the respective benefits of part-day and full-day programs in different communities.

- Head Start would move slowly towards it goal of being more responsive to families' increasing needs for child care.

Con

- Would be likely to serve less than 50,000 additional children because a portion of new funds would be used to provide full-day services entirely with head Start funds at higher than average cost.

- Without special incentives, fewer grantees would stretch to make the extra effort to negotiate partnership arrangements and blended funding regardless of the needs of families for child care. Further, while a segment of grantees will elect to create full-day strategies, the Administration won't receive any credit for leadership from State officials or the larger early childhood community.

To Nicole FYI

STUDY AND APPLICATION OF A RELATIONSHIP BETWEEN SYNAPSE POPULATION, ENVIRONMENT, AND GROWTH OF LEARNING POTENTIAL IN HUMAN BABIES

George A. Cowan and Irving Lazar
Santa Fe Institute
and
Bettye Caldwell
University of Arkansas for Medical Sciences

She gave it to me when I was in L.R.

Recent methodological advances in the neurosciences have allowed detailed studies of (1) rates of growth and size of the stabilized synaptic population in various areas of the human brain at early ages and (2) rates of glucose metabolism in various parts of the brain from infancy to puberty. Other studies, based largely on non-human samples, point to heavier and more synaptically developed cortices associated with early environments offering a variety of stimulation. Behavioral achievements of the human infant have been meticulously charted over the years and described in loose metric terms. However, there has been little attempt to relate the behavioral changes to the postnatal wiring of neural pathways necessary to support behavioral change.

In this project we will develop an early enrichment program designed to optimize behavioral differentiation and growth by providing experiences needed by developing neural processes. The enrichment will be directed to a representative sample of infants, not merely to children considered at risk for developmental problems and delays. The enrichment will be provided to an experimental group of 48 infants, with a comparable control group followed and assessed at all evaluation time points. As about 54% of mothers of infants younger than one year work at least part-time, with that percentage increasing yearly, it was decided to offer the enrichment not in the homes, as has often been done with at-risk children, but in their child care settings. Adult:child ratios will be carefully controlled and will not exceed 1:3. The enrichment model also will will make use of "enrichment teachers" who will work individually with a small number of infants for two hours a day several days a week. The enrichment teachers will work closely with the family day caregivers and will offer suggestions of activities that will reinforce the learning that takes place in the individual sessions. In addition, a variety of parent activities will be provided the participating families. Major assessment points will be at 6, 12, and 18 months.

Specific activities planned for the project include the following:

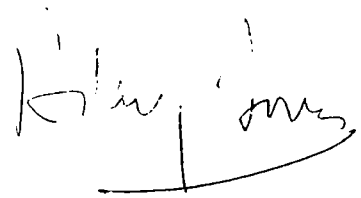
1. Construction of an assessment protocol which will permit identification of very small increments in behavioral development and learning and a mapping of specific individual differences in learning style, perception, activity level, attentiveness, creativity, and tractability at very early ages.

2. Identification of specific behavioral counterparts to specific events in neurological development during the first 18 months of life. This will involve exploring the interaction between neurological structures and experience and the effects of these interactions on the emergence of cognitive functions.

3. Design of a coordinated system of services, instruction, and curricular activities to do a more effective job of nurturing the cognitive and perceptual development of infants in ways that build on the individual characteristics of families. This will involve the design and implementation of a broad system of training for the enrichment teachers, nurses, pediatricians, and others participating in the enrichment activities.

4. Development of an assessment schema which will not rely simply on total scores on standardized tests administered at selected assessment points but which will chart behavioral increments as they occur in the lives of the children, making every effort within existing technology to tie these increments to neurological advances.

This is an interdisciplinary project which will be enriched by the history of such collaboration at the Santa Fe Institute. For example, Charles Stevens (neuroscientist with the Salk Institute and SFI) and David Pines (physicist from the University of Illinois, the Aspen Institute of Physics, and SFI), among others, have expressed interest in planning mathematical and computational models to relate size, complexity, and activity of synaptic networks to early cognitive development. This project will allow SFI to expand into the social sciences by focusing on studies of relationships between learning potential, learning achievement, and relevant aspects of individual and social human behavior. Conversely, it will allow scientists who have been pursuing knowledge separately on one or the other side of what should be conceptualized as an inviolate relationship--brain and behavior--to enrich their mutual understanding by dealing with the process as a gestalt. Such an understanding will inevitably benefit the children participating in the project and those of the future whose development will be served by the knowledge it will generate.



New Erikson Project Links Science, Early Childhood

A well-respected Chicago institute is joining the new effort to better link neuroscience with early childhood education.

The Erikson Institute's Early Childhood Professional Development Project on the Brain will include three years of activities to identify core elements of neuroscience for those who teach infants, toddlers and preschoolers. The project comes at a time when scientists and educators are forging new links to discuss theories about how young children learn.

Neuroscientists recently have drawn new conclusions about infant brain development and implications for future learning. Infants begin to develop language skills in the first six months of life, when brain cells also form linkages for future learning in math, music, science and other areas, this research shows (*RPP*, December 11, 1996, p. 197)

Faculty and Staff

The Erikson project will target early childhood professionals as well as the faculty who teach them, said Linda Gilkerson, the project director. In the first year of the project, researchers will perform a city-wide survey of college curricula on early childhood education. They also will sponsor a seminar series on the child's developing brain.

During the second year, experts will identify elements of neuroscience theory and recommended practices applicable to infant and early childhood projects. A study group also will devise a strategy to convey this knowledge to early childhood professions.

Participants will introduce core concepts of neuroscience into pre-service and in-service education programs for early childhood staff by the project's third year. Erikson also expects to hold two national symposiums to discuss its findings.

Foundation Funding

Erikson is receiving funds for the project from the Robert R. McCormick-Tribune Foundation and the Harris Foundation.

For more information, contact Gilkerson at (312) 755-2550, ext. 2277, or Irmgard Gruber, Project Coordinator, at (312) 755-2250, ext. 2243, or write to: Erikson Institute, 420 N. Wabash Ave., Chicago, IL 60011.

In Brief

• **Rep. Matthew Martinez** (D-Calif.) will become senior Democrat on the House Early Childhood, Youth and Families Subcommittee in the 105th Congress. Martinez replaces Rep. Dale Kildee (D-Mich.), who will take the senior slot on the subcommittee that oversees colleges. Kildee will remain on the early childhood panel, however. Other Democrats named to the early childhood panel are Reps. George Miller (Calif.), Robert Scott (Va.), Chaka Fattah (Pa.), Major Owens (N.Y.), Donald Payne (N.J.), Patsy Mink (Hawaii) and Tim Roemer (Ind.). The chairman is Rep. Frank Riggs (R-Calif.). Both the early childhood and college subcommittees are part of the Committee on Education and the Workforce, chaired by Rep. William Goodling (R-Pa.).

• **The Healthy Steps** for Young Children program will receive up to $500,000 from the Commonwealth Fund to evaluate health-care programs for children from birth to age 3. The Healthy Steps program targets the birth-to-3 group, promoting closer relationships between health professionals and parents. The grant will support operations and research at 10 local sites. Future plans for the funds include technical assistance through the Internet and other means. The Commonwealth Fund also will provide $554,733 to the Johns Hopkins University School of Hygiene and Public Health to evaluate the success of Healthy Steps programs. For more information, contact: Commonwealth Fund, One E. 75th St., New York, NY 10021-2692; (212) 535-0400.

• **Up to $4.1 million** in federal funds is available this year to improve emergency medical services to children. Accredited schools of medicine and state governments are eligible for the program, which can provide planning grants, implementation grants and partnerships linking local, regional and state agencies and targeted grants that focus on a specific issue or concern. The U.S. Health Resources and Services Administration (HRSA) expects to award two one-year planning grants of $50,000, four two-year implementation grants of $250,000, 32 two-year partnership grants of $60,000 and seven two-year targeted issue grants of $50,000 to $150,000. For an application, contact: HRSA Grants Application Center at (888) 300-HRSA (phone) or (301) 309-0579 (fax). Application deadline is April 11.

DING-A-LING
Fort Lauderdale, Florida

"In order to maintain the quality of our service, we have to retain our employees. With a child care benefit program, employees never leave. Child care translates into good business."

Herman Shooster, Owner
Ding-A-Ling

ABOUT THE EMPLOYER:	ABOUT THE BENEFIT:
Type of Business: Family-owned answering and beeper service	**Year Benefit Began:** 1989
Year Established: 1973	**No. of Employees Using Benefit:** 17
Number of Employees: 110	**No. of Children Served:** 20
F/T: 72 **P/T:** 38	**Type of Program:** Voucher
Average Age: 20-35	**Maximum Employer Copayment:** $30/week
Percent Women: 95%	**Total Employer Cost, 1990:** $25,000
Other Benefits: Unpaid Leave	

Background: The workforce at Ding-A-Ling is comprised predominantly of single mothers. Herman Shooster, Ding-A-Ling owner, realized that he was losing many workers because of child care problems. "Economically, it was easier for parents not to work than to pay for child care. This was not good for business, so we implemented a child care subsidy program in 1989 because we felt that a direct subsidy would give employees the flexibility they need to find quality, affordable child care."

Benefit Description: When prospective employees apply for a job with Ding-A-Ling, they are presented with a packet of information describing company benefit programs. The firm also includes a description of the child care benefit plan in any company job announcements.

Advantages: According to Mr. Shooster: "The advantages of the benefit have gone beyond reducing absenteeism and turnover. The

"Goodnight room, goodnight moon...."

by Perri Klass

Raising children is, of course, very educational — and one hopes it is even somewhat educational for the children. As a parent of three, and a primary care pediatrician, I have learned a great deal about protectiveness and control, and the boundaries of control and protection. I have also learned a thing or two about human potential, some embarrassing facts about my own limitations and shortcomings, a few home truths about what is most important to me, and the complete lyrics to the "antigarden" song — the ten-year-old boy's idea of devastating wit. (Instead of "Inch by inch, row by row, I'm gonna make this garden grow," it starts out, "Slug by slug, weed by weed, my garden's got me really teed!") And a lot, of course, about love.

But over and over, the lesson I keep learning at home and at work is this: It's hard to do for your children what no one did for you. We all use scripts that are familiar. Just as my children, mysteriously, seem to know every word of the fights and teases that my brother and I developed for the back seat of the car, so I open my mouth and hear my parents' voices come out — same threats, same modulations, same life-saving humor.

It's hard to give your children what no one gave you. It's hard no matter how badly you want them to have lives different from the one you lived, childhoods full of every joy and every possibility. At the Boston neighborhood health center where I work, I meet parents who are often desperate to make for their children the warm-safe-happy place that they themselves never had, to send the message "you can be anything," even though their own lives were limited and circumscribed from the first.

But how do you know what to do, unless back in your own deepest memories you have all the silly games and loving tones of voice, the billion idiosyncratic tiny moments that add up to what child development experts call face-to-face time, speech and language stimulation, parent-child interaction? How do you write your own script? How do you know how important it is to hold small children and read aloud to them, if no one ever read to you?

That's why I give out books. Through a program called Reach Out and Read, developed several years ago at Boston City Hospital (now Boston Medical Center), pediatricians and nurse practitioners learn about the part of literacy that happens before children get to school — the association of books with parental love and the parental lap, the awareness of books as sources of entertainment and pleasure.

How do you write your own script? How do you know how important it is to hold small children and read aloud to them, if no one ever read to you?

Early on, children develop "book babble," the sing-song tones that sound like reading aloud, and they will correct you if you get a word wrong or miss a line. Long before children start learning how to sound out letters, a great deal goes on — cognitively, developmentally, and emotionally — in relation to books and reading. By around eighteen months, I explain to doctors, a child who has been read to can fill in the word at the end of the sentence: "Goodnight room, goodnight moon, goodnight cow jumping over the — " You can imagine how delighted I was when my own younger son, at the advanced age of nineteen months, finally produced a "moon!" on cue.

Reach Out and Read has three components. In the waiting room, volunteers read to children who may be anxious about shots and medicines, modeling for parents that reading aloud to children is fun. During the check-up, doctors and nurses counsel parents about reading to young children, about the importance of rhyme, repetition, and questions like "what's that?" teaching even babies that things have names. At the end of each check-up, every patient, from six-month-old to five-year-old, is given a free, beautiful new children's book to take home. (Ten books by the age of five, at three to four dollars a book, is thirty to forty dollars a child to start a small home library — very cheap indeed, in medical terms!)

For all my training and position as a professional giver of advice to parents, I don't feel that I am in any way a natural genius as a mother. Games with small children do not come easily to me, and I get bored quickly. I wrote an article once about breast-feeding, and happened to mention that all my children, while nursing, had developed the habit of swatting at the book in my hand. I was reproached in letters: "How can you read during this precious mother-infant bonding time?" Nevertheless, I continue to read every chance I get, and have been much relieved to learn that "witnessed sustained silent reading" is thought by experts to be very important in children's literacy development. And on witnessed sustained silent reading, I yield to no one.

The point is, reading aloud to my children has always offered me a straightforward, delightful way to spend time together. I like reading to babies; I like reading to a toddler on my lap; I like reading chapter books to older children, and getting the chance, sometimes, to go back to books I've dearly loved and watch my children discover them. I find myself reading *Mike Mulligan and His Steam Shovel* aloud to a three-year-old, and I am suddenly possessed by a strong tactile memory of the copy my own mother took from the Vermont library when I was three, and I'd be willing to bet that I come close to echoing her sound effects. During the most tumultuous phase of my daughter's truly tumultuous terrible twos, there were times when the only guaranteed happy, peaceful, not-fighting time we had was that sleepy, pajamaed, girl-on-the-lap time, with *Madeline* and *Wild Things* and *I Need a Lunchbox* (great book, that last one; check it out if you don't already know it).

So when I give a child a book, I think it offers parents a new script, a new range of possibilities. A tangible way to show your love, your hope, and your faith in your child. Even if you didn't know that books had a place in a nine-month-old's day; even if you have to make up all the intonations; even if you didn't do well at reading in school; even if times are hard and money is short. Even if no one ever did it for you. R

Perri Klass '78, MD '86 is a pediatrician at Boston Medical Center and Dorchester House, the medical director of the Reach Out and Read program, and the author of several books, including *Baby Doctor: A Pediatrician's Training* (Ivy Books, 1993) and the novel *Other Women's Children* (Ballantine Books, 199

February 11, 1997

Hillary:

One more story about Reading to kids, by those parents who don't know how. Perri Klass is a terrific spokesperson for this —

VCC article to Nicole — good permission material Melissa

Recommendations Specific To Infant And Toddler Child Care

[These child care recommendations appear scattered throughout our list of recommendations. They are collected and repeated here for easy reference.]

Continuity of caregivers: best practice for child care programs

❑ *State guidance should promote continuity of care. Child care centers should be strongly encouraged to have providers move up the age range, so that they care for the same children from infancy to preschool.*

❑ *Child care programs should assign a particular caregiver for each child.*

❑ *Federal child care legislation and corresponding federal regulations should eliminate conflicting regulations, eligibility standards and funding mechanisms so that families are not forced to change child care situations in order to receive child care subsidies. States should move quickly to implement these changes.*

Stability of child care providers over time

Stronger state standards, federal leadership, and community education

❑ *The states should set timetables for bringing infant and toddler child care standards regarding group size and adult/child ratios up to at least minimally adequate levels. For children not yet mobile, group sizes should be no larger than six; ratios should be no more than 1:3. For children crawling and up to 18 months, the group size should be no more than nine; ratios no more than 1:3. For children 18 months to 3 years, group sizes should be no more than twelve; ratios 1:4. Centers and group homes with mixed age groupings should never have more than two children under 2 years of age in a single group. Family day care providers caring for mixed age groupings should never have more than two children under 2 years of age.*

❑ *Federal child care legislation should be amended to provide incentives for states to rapidly implement such standards.*

❑ *A federal entity should regularly survey the progress of states, and identify and promote promising state initiatives.*

❑ *States and localities should increase guidance to families on how to choose quality child care for their infants and toddlers.*

Higher minimum child care wages

❑ *State legislation should set the wages of infant and toddler care providers at a level substantially above the minimum wage, with mandated benefits. Infant and toddler child care providers with substantial training should have minimum salaries set by state law equivalent to the state's primary school teachers.*

❑ *Through refundable child care tax benefits or other cash subsidies to low- income parents and/or child care providers, the federal government should begin to bridge the gap between what families can afford to pay and what child care really costs if staff are paid appropriately.*

The responsive understanding of child care providers

❑ *States and communities should require that child care providers have training specifically in infant development and family-centered infant care sufficient to meet the Child Development Associate credential or similar standards. There should be no exemptions to this policy for schools or religious organizations.*

❑ *Federal funds should provide incentives for the early enactment of infant and toddler training requirements by states.*

❑ *The federal government should act as a clearinghouse for the promulgation of best practice and technical assistance in infant and toddler child care.*

Making child care a resource for parents

❑ *All preservice and inservice training for infant care providers should be broadened to emphasize the importance of establishing a relationship with parents in which discussions of the child's development, and of the parents' role in it, can naturally occur.*

❑ *State and local regulations should require that child care providers attempt to establish such relationships and that they regularly initiate discussions of developmental and parenting concerns with families.*

Adequate space in child care settings

❑ *States should require as usable play space in center-based group care:*

- 0-8 months [for a group no larger than six] — *350 square feet per group*
- 8-18 months [for a group no larger than nine] — *500 square feet per group*
- 18-36 months [for a group no larger then twelve] — *600 square feet per group*

❑ *in family child care: [for a mixed age group with no more than two children under age 2]* — *600 square feet per group*

Making child care a health resource

❑ *States should require that all child care providers be trained to recognize apparent health and developmental problems, to encourage parents to seek appropriate treatment, and to identify the appropriate services. State licensing and monitoring systems should support those practices.*

❑ *Federal funding should be structured to induce state agencies supervising health, child care and developmental disabilities to collaborate in making screening and follow-up referrals a reality.*

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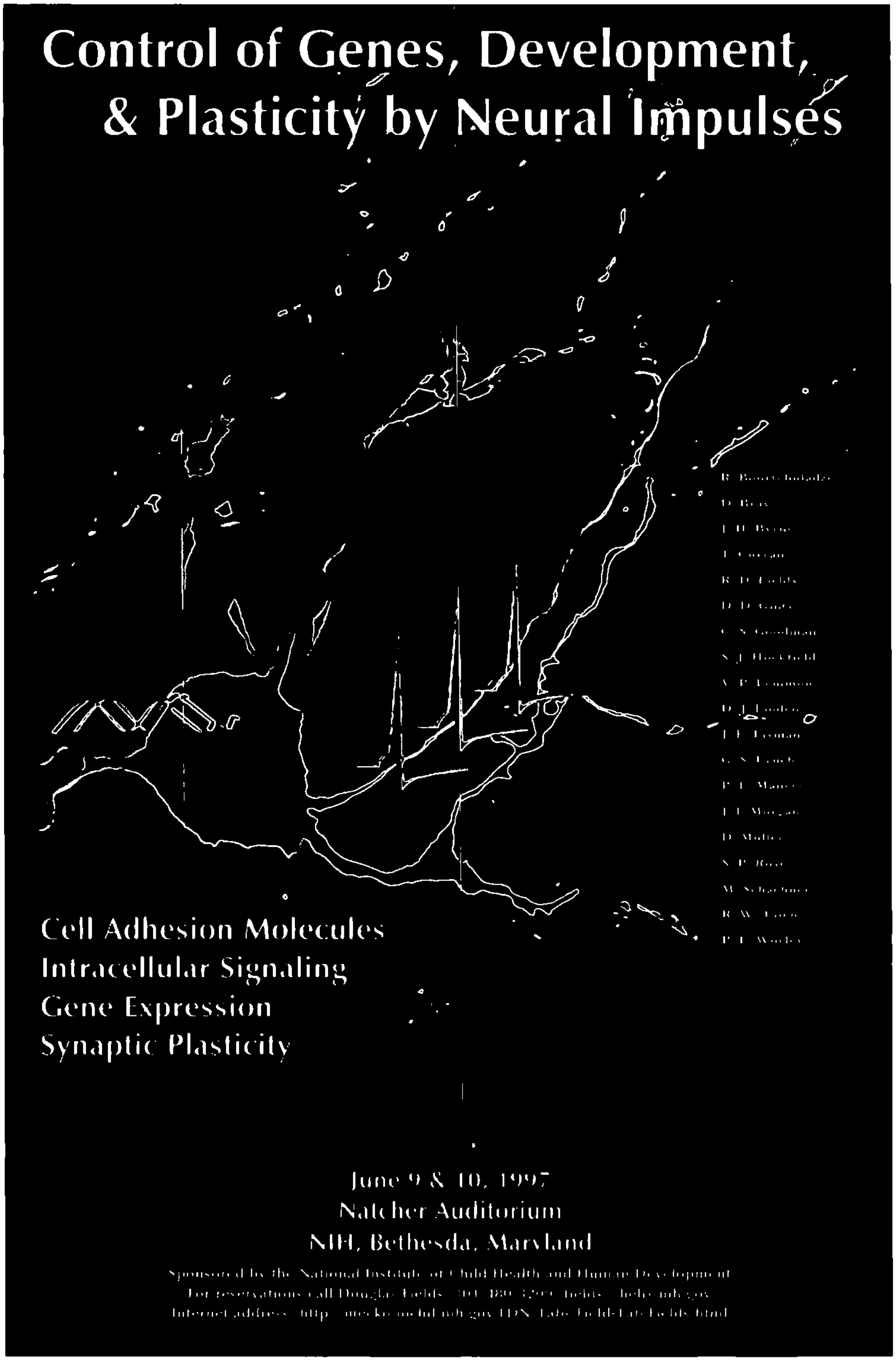
Control of Genes, Development,
& Plasticity by Neural Impulses
Cell Adhesion Molecules
Intracellular Signaling
Gene Expression
Synaptic Plasticity
June 9 & 10, 1997
Natcher Auditorium
NIH, Bethesda, Maryland
Sponsored by the National Institute of Child Health and Human Development

Control of Genes, Development and Plasticity by Neural Impulses

- Cell Adhesion Molecules
- Intracellular Signaling
- Gene Expression
- Synaptic Plasticity

Organizer: R. Douglas Fields, Ph.D.
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Speakers:

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D. Bray

J. H. Byrne

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R. D. Fields

D. D. Ginty

C. S. Goodman

S. J. Hockfield

V. P. Lemmon

D. J. Linden

J. E. Lisman

G. S. Lynch

P. F. Maness

J. I. Morgan

D. Muller

S. P. Rose

M. Schachner

R. W. Tsien

P. F. Worley

Location

Natcher Auditorium, National Institutes of Health

Bethesda, Maryland

Bringing together new research on gene regulation by neural impulse activity, with research on synaptic plasticity and intracellular signaling, this conference explores the molecules and mechanisms that coordinate the structure and function of the brain. It is now known that cell adhesion molecules (CAMs), which regulate nervous system development, are also regulated by action potential activity. By controlling cell-cell interactions and activating intracellular signaling pathways, CAMs are now seen as important molecules in controlling the structure of the nervous system according to the pattern of impulses flowing through developing neural circuits. New experimental and theoretical advances are beginning to show how second messengers, kinases, and transcription factors operate as a system to transmit and integrate information contained in action potential activity and control transcription of genes involved in activity-dependent plasticity. Presentations include studies on invertebrate and vertebrate nervous systems in the context of development, LTP, LTD, and memory.

Sponsor
The National Institute of Child Health and Human Development
National Institutes of Health

Day 1
June 9, 1997

9:00-9:10 **Welcome and Opening Remarks**
Dr. Arthur S. Levine
Scientific Director
National Institutes of Child Health and Human Development, NIH

Session I: Activity-Dependent Regulation of Neural Cell Adhesion Molecules in Development & Synaptic Plasticity

Chairperson *Dr. Steven P. R. Rose*
Brain and Behavior Research Group
Open University, England

9:10-9:50 **Conference Overview and Regulation of L1 and *c-fos* by Specific Patterns of Action Potentials**

Dr. R. Douglas Fields
Head, Neurocytology and Physiology Unit
National Institutes of Child Health and Human Development

9:50-10:30 **Genetic Analysis of Synaptic Growth and Plasticity in *Drosophila***

Dr. Corey S. Goodman
Department of Molecular and Cellular Biology
University of California, Berkeley

10:30-11:10 **Cell Adhesion Molecules in Activity-Dependent Plasticity of the Vertebrate Nervous System**

Dr. Melitta Schachner
Zentrum fur Molekulare Neurobiologie
University of Hamburg, Germany

11:10-11:50 **Cell Adhesion Molecules in Conversion of Short-Term to Long-Term Memory**

Dr. Steven P. R. Rose
Brain and Behavior Research Group
Open University University, England

11:50-12:30 **Poster Session**

12:30-1:00 **Lunch**

Session II: Intracellular Signaling from Neural Impulses and Cell Adhesion Molecules

Chairperson *Dr. Corey S. Goodman*
Department of Molecular and Cellular Biology
University of California, Berkeley

1:00-1:40 **Cell Contact Induces Rapid Changes in the Phosphorylation/Conformation of L1**

Dr. Vance Lemmon
Neuroscience Department
Case Western Reserve University

1:40-2:20 **NCAM and L1 Signaling Through Nonreceptor Tyrosine Kinases in Nerve Growth Cones**

Dr. Patricia Maness
Biochemistry and Biophysics Department
University of North Carolina School of Medicine

2:20-3:00 **Novel Signal Transduction Mechanisms in Neural Plasticity**

Dr. Paul F. Worley
Neuroscience and Neurology Department
Johns Hopkins University School of Medicine

3:00-3:20 **Coffee Break**

3:20-4:00 **Modeling Intracellular Signaling with Neural Networks**

Dr. Dennis Bray
Department of Zoology
University of Cambridge, England

4:00-4:40 **Modeling Activity-Dependent Gene Regulation in Learning and Memory**

Dr. John H. Byrne
Director, Neuroscience Research Center
The University of Texas Health Science Center, Houston

4:40-5:30 **Poster Session**

Day 2
June 10, 1997

Session III: Control of Gene Expression by Extracellular Signals

Chairperson *Dr. Melitta Schachner*
Zentrum fur Molekulare Neurobiologie
University of Hamburg, Germany

9:00-9:40 **Gene Expression and Neuronal Death and Regeneration**

Dr. James I. Morgan
Co-Chairman, Developmental Neurobiology
St. Jude Children's Research Hospital

9:40-10:20 **Activity-Dependent Regulation of Extracellular Matrix Molecules**

Dr. Susan J. Hockfield
Department of Neurobiology
Yale University School of Medicine

10:20-11:00 **Role of Reelin in the Control of Cell Migration in the Developing Brain**

Dr. Tom Curran
Chairman, Developmental Neurobiology
St. Jude Children's Research Hospital

11:00-11:40 **Neurotrophin Regulation of Gene Expression**

Dr. David Ginty
Neuroscience Department
Johns Hopkins University School of Medicine

11:40-12:20 **Mechanisms of Signal Transmission from Synapse to Nucleus**

Dr. Richard W. Tsien
George Smith Professor
Molecular and Cellular Physiology Department
Stanford University Medical Center

12:20-1:30 **Lunch and Posters**

Session IV: Cell Biology of Synaptic Plasticity

Chairperson *Dr. Richard W. Tsien*
George Smith Professor
Molecular and Cellular Physiology Department
Stanford University Medical Center

1:30-2:10 **Signaling Pathways which Underlie a Late Phase of Cerebellar Long-Term Depression**

Dr. David Linden
Neuroscience Department
Johns Hopkins University School of Medicine

2:10-2:50 **Genes Important for Long-Term Plasticity and Memory**

Dr. Roussoudan Bourtchuladze
Center for Neurobiology and Behavior
Columbia University

2:50-3:10 Coffee Break

3:10-3:50 **Contribution of PSA-NCAM to Synaptic Plasticity**

Dr. Dominique Muller
Neuropharmacology Department
University of Geneva, Switzerland

3:50-4:30 **Synaptic Adhesion Molecules in the Consolidation of LTP**

Dr. Gary S. Lynch
Center for the Neurobiology of Learning and Memory
University of California, Irvine

4:30-5:10 **Is the Nucleus Involved in Memory Storage or Memory Gating? The Evidence Favors the Latter.**

Dr. John E. Lisman
Biology Department
Brandeis University