

# The Abell Report

*What we think about, and what we'd like you to think about*  
Published as a community service by The Abell Foundation

## Abell Salutes: Educational Opportunity Program (EOP) at Lake Clifton-Eastern High

*"We do whatever it takes to make it work."*

Some Lake Clifton students headed for dropout and the streets are now headed for college. The reason is a program called the Educational Opportunity Program (EOP). EOP is not just one more program designed to assist disadvantaged students get on in life; this one is among those that work.

"It works," Nathaniel McFadden, facilitator of the program, says, "because we do whatever it takes to make it work." And it takes a lot—of energy, understanding, perseverance, commitment, and, especially, dedicated people.

The program was conceived by businessman and citizen activist Robert Bonnell, philanthropist William March and retired Baltimore City assistant school superintendent Theda Wilson. Inspired by Eugene Lang's "I Have A Dream" initiative in 1985, they arranged to meet personally with Lang in New York and came back to Baltimore with their own dream: they would bring hope to students in a school where, Wilson said, "There is no hope." To transform the dream, an action plan was created for what ultimately came to be known as Educational Opportunity Program (EOP). The founding group then raised \$270,000 to support it for 54 students in Lake Clifton-Eastern High.

The program's objective is, first, to keep students from dropping out, and then in the ideal, to inspire them—lending support with scholarship money—to go on to college.

The program is made up of several programs that function together and complement each other. Bonnell acted as part-time coordinator for the first class, from 1986 to 1988. McFadden, a former schoolteacher and city councilman, took over as full-time facilitator of the overall

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## A School for Black Males; Is It An Answer for Baltimore?

*Advocates say it's necessary—"A population is literally dying." But detractors insist, "It's segregation—all over again!" There is important sentiment to see the idea tried in Baltimore.*

**I**n the spring of 1990, frustrated with criticism of his board's decision to open two public schools (one elementary, one middle) geared exclusively to needs of black boys, then Milwaukee School Superintendent Robert Peterkin vigorously defended his position: "A population is literally dying!"

Peterkin had in mind grim statistics: the leading cause of death among young black males (one out of 20) is murder; one out of every four is in prison; 25 percent drop out of high school; the unemployment rate is 22 percent (double that of young white men); they are three times as likely to die of cancer and of AIDS (than young white men).

The portent of this profile for American communities, particularly cities with large black populations such as Baltimore, is alarming by any measure. It threatens the community's stability, saps its strength and stultifies progress.

"We can wring our hands," Peterkin said, "or we can try something new." Some critics feel the idea is not new—merely racial segregation all over again; others, that new or not, it's the only hope. Jawanza Kunjufu, a black educational consultant, says, "If you intervene in the third or fourth grade, you have a chance." Whatever the pros or the cons, the Milwaukee experience is bringing serious questions into sharp focus in Baltimore: What is the size of the problem? Do black males really have "special needs"? Is the creation of these separate schools an appropriate answer? Must their curriculum be, as some advocates insist, "Afro-Centric"? Are they even legal?

The "size of the problem."

Since Baltimore is one of the poorest cities in America, it would seem reasonable to assume that the profile of the young black male drawn from national statistics is a profile, too, of the young black male in Baltimore City. As a matter of fact, recent figures on the dropout rate for black students (male and female) in the Baltimore public schools are higher than the comparable national figures. Nationally, it has been estimated that the dropout rate is 25 percent; in Baltimore City, it is approximately 55 percent.

### By any measure, young black males are faring badly

Moreover, in Baltimore City, comparing the status of young black males with young white males, and taking into account that blacks make up more than 50 percent of Baltimore's population, blacks are faring badly by any measure: out of proportion to their numbers, far more blacks than whites are in the state prison, and are living in parole status or probationary status and unemployed. And far more young black males than their counterparts in the white community, out of proportion to their percentage of the city's population, will die before age 24.

Baltimore, clearly and unhappily, can take its place among those cities in America that will have to deal with the consequences of what Milwaukee School Superintendent Peterkin called "a dying population."

The consequences of the phenomenon are apparent: when young black males drop out of school, they often end up

dropping out of society. Some become criminals; many go to prison, many murder or are murdered, or find a life on the street barely this side of the law. Too many do not become responsible heads of households, or do not become business or professional men, or citizens participating in civic life. In too many cases, in the wake of their withdrawal, they leave, among intractable problems for the society to deal with, families without fathers and providers. To children and family left behind in the sad drama, they leave a home without a positive male role model. Worse, everything is in place for a recycling of the scenario. By any measure, the cost to society of Peterkin's assertion that the black male generation is dying, is incalculable.

And everybody pays.

But is the answer one of operating schools exclusively for black males? Do black males really have special needs?

A body of thinking argues that, yes, it is, and yes, they do.

### **"Our schools are failing our (young black male) students"**

According to Dr. Spencer Holland, Director of the Center for Educating African American Males at Morgan State University, "Our schools are failing our students. They don't provide enough black male role models. They skim over or ignore black culture and history. They enforce an implicit double standard regarding black men and their white counterparts." Dr. Holland feels that young black boys have more trouble in school than young black girls because of the frequent absence of positive male role models at home and because of the lure of gangs. "The most significant role models for these young black boys are female relatives. They need an environment that addresses the deficiencies in their lives. Exclusively black male schools provide this environment."

The school system of the city of Milwaukee is providing a laboratory where believers and non-believers will be able to observe the experience. By the fall of 1991, the system will have established two public schools with a total enrollment of

about 1,350. To be known as "African American Immersion Schools," their overall goals are to focus on a "multi-cultural" curriculum, build self-esteem and promote the rewards of responsible black behavior.

According to Kenneth Holt, a principal in the Milwaukee school system who is administering the program, "The curriculum is going to be multi-cultural. Students will learn all subjects—math, history, English, science—with an emphasis on the roots of facts and of ideas, drawing from the Hispanic, African, English and Native American." As an example, Holt says, "Algebra will be presented to the students as the invention of the Africans—specifically, the Egyptians. When the students learn about the wars America has fought—the Civil War, both World Wars, Vietnam—they will learn the role in these wars not only of white Americans, but of the black and the brown, the red and the yellow. That is what we mean by teaching a 'multi-cultural' curriculum. That is one of the things the African American Immersion Schools are about."

The other principal thing they are about, for the young black male, is living and growing and learning in an all-male environment.

### **A sensitive issue to resolve**

For the Milwaukee School Board, creating that environment in a public school system while remaining in compliance with laws that prohibit single-sex schools has been a sensitive issue to resolve. Holt explains Milwaukee's policy: "Girls are eligible to attend either of the two African American Immersion Schools," Holt says, "and a few do. They are enrolled in the regular academic curriculum—math, science, history and English. But they are not eligible for those courses that are devoted exclusively to nurturing black boys. It has to be said, though, that when we say these schools are exclusively for black boys, we are being less than accurate. It would perhaps be more accurate to say 'schools for young African Americans.' But our strong focus is on boys, so we continue to refer to these schools as 'all male'."

Whatever, males in these not-exactly-male schools will, according to Holt, have an "intense" experience. The school day will be an extended one; it will start at 8:30 a.m. and not end until well after 3:30 p.m.

There will be "heavy dosages of homework" and the school year will go "deep into the summer." "African American Immersion Schools is what they are called," Holt says, "and immersion is the right word."

Dr. Spencer Holland has strong ideas about, and specific definitions of, immersion. "Anything less than immersion into an all-black educational and social environment for these young black boys will not do. Listen—" and here Holland becomes emotional, "black boys in Milwaukee are done for! Eighty percent of them are not even eligible for extracurricular activities! They can't even maintain a 2.0 average! Seventy percent are scoring below grade level! How can anybody ask why total 'immersion' is called for?"

**"The simply answer is...  
'we will handle them.'"**

But what is there about an all-black social and educational environment that is going to make a difference in the education and growing up of these black boys? Holland explains, "Because our black teachers will take no crap from these kids who are so used to giving it! Our teachers are going to be like fathers to these boys. Does a strong father take any guff off his kid? Well, neither will these teachers. When one of our black teachers says, 'Bring your homework in tomorrow or I'm going to kick your butt,' believe me that kid will bring in his homework. The simple answer to the question, 'What will we be doing that cannot be done with less than immersion?' is we will handle them—black man to black boy, you understand? That is what will make the difference.

"And we will know when we are succeeding; the standards of measurement are very clear. We will have achieved success when that 80 percent ineligible figure comes down to be about what it is for white kids from middle-class homes. When the numbers of boys not making 2.0 comes down to what it is for whites—as we move towards figures that bring these black boys into the mainstream of the educational and social system, and to the extent that we do, we will know we are succeeding."

Dr. Gwendolyn J. Cooke, principal of Lemmel Middle School, strongly supports the Milwaukee program. "I think it's a wonderful idea, and ought to be tried here in Baltimore. I can't tell you exactly what

it is that happens when an African-American teacher—a role model, to be sure—gets close as a teacher to a young African-American boy. All I can tell you is that something good happens—the relationship makes for a better and far more effective teaching and learning experience.

“These young African-American boys deserve the opportunity that this kind of school will provide them. Without such schools, we are going to lose these boys.

“And I am not at all supportive of my colleagues in the African-American community who say we shouldn’t have these schools because they are segregated. My answer is, so what? It’s the quality of education that counts, with integration or without it. If I have the books and the teachers and the resources to teach, I do not need an integrated classroom to make my education work.

### **“I hope we go ahead with it in Baltimore soon.”**

“Integration is not the issue. Education is. And to me these schools designed to focus on educating young black boys is a fine idea. I hope we go ahead with it here in Baltimore soon.”

Notwithstanding the zeal of supporters such as Peterkin and Holland and Cooke, the idea has come under strong and highly vocal—and equally passionate—criticism.

Dr. Kenneth Clark, a consultant whose research guided the Supreme Court’s decision banning school segregation, expressed concern about what he called the “reemergence of schools that are intentionally racially segregated and about separating students on the basis of sex.” “For adults to impose this nonsense on children,” he said, “is academic child abuse.

### **“It’s been accepted as if it made sense. It does not.”**

“It’s outrageous, it’s absurd. It’s a continuation of the whole segregation nonsense. Even in military schools they’re learning male and female together. I didn’t expect anybody to come up with anything like this. This is what I was fighting against. What fascinates and discourages me is that it’s been accepted as if it made sense. It does not, unless this society wants to regress.”

The New York Times editorialized against the program: “Young black men

need to deal with the larger society as well. What’s needed in schools is a nurturing environment in which all at-risk students begin to believe they can succeed. Segregation is not the answer.”

The Baltimore Sun, in a strongly-worded editorial which it titled, “Milwaukee’s Backward March,” commented, “Segregating black boys in ‘African American Immersion’...seems like less of an answer than an exercise in isolation.”

William Chester Jordan is a professor of European history at Princeton—and a black. He writes in an op-ed piece in the New York Times, “Separation not only impoverishes, it must lead to a distressing emphasis on ‘otherness.’ Do we have to hurt the black boys in this misguided effort? We have crippled enough children in anger. Must we do so with misguided love?”

If any elected official in the state of Maryland knows the black city students’ experience with public education, it is Delegate Pete Rawlings. He himself is a product of growing up in the Edgar Allan Poe project housing on Fremont Avenue and Lexington Street. His is a bootstrap story: he graduated from Douglass High and went on to earn his B.A. at Morgan and his masters degree from the University of Wisconsin. His view of the Milwaukee experiment is drawn from personal, and first-hand, familiarity with the problems:

“The idea of this kind of educational environment for these black boys is worth looking into. I believe the Baltimore City School System should begin a limited test of such a program.

“The system should start with a few classes—all black, all male, taught only by black males. I would look at the program after, say, three years, and see where it is going.

“And by the way, a major part of the problem is getting the black teacher-role models on the faculty. Finding black male role models is key to the program and that part of it is not going to be easy. I’d like to see how Milwaukee is handling this phase of it.

“This kind of program in Baltimore holds promise. But I’m as worried about getting the teachers as I am about the arrangements that put the boys in this special environment.

“But in the end, I’d like to see at least a beginning here in Baltimore City.”

Dr. Robert Slavin, Director of the Center for Research on Effective Schooling for Disadvantaged Students, Johns Hopkins University, disagrees.

“Setting aside the fact that the arrangement is clearly illegal,” he says, “and the NAACP itself has no doubt about that, such a program moves us backwards. It’s segregation—all over again, and how can anyone like me who worked hard for desegregation believe in it?”

“Secondly, it’s not realistic.

“There simply aren’t enough male role models to fill the bill.

“And third, there is no validity to it in terms of its being a technique to improve the educational experience of young, black males. The facts are that there are many female teachers, both black and white, who have proven very effective in working with black boys. There is no convincing evidence to support the notion that in inner city schools males do as well on average with female or male teachers, or that males in all-male schools do better or worse or the same as males in coed schools.

“And lastly, I’m against it here in Baltimore because I don’t believe in starting pilot programs unless, realistically, they can be duplicated throughout the school system. In my view, this program cannot be; the resources are not here.

“I have to be against it.”

Dr. Jomills Braddock, Director of the Johns Hopkins Center of Effective Schooling for Disadvantaged Students, occupies the middle ground in the debate: he feels strongly that segregation in any form is a bad and backward policy, but he feels equally as strong that Baltimore City should explore the idea, not as an end in itself, but to learn from it. “To me, it’s the testing that’s important. From it, we may learn new strategies for teaching and learning that may prove useful.”

Dr. Braddock is comfortable with the notion that African American males may indeed do better in school, and in life, if their schooling is in an all-male, all-African-American environment. “I am encouraged by a certain amount of hard data and a great deal of anecdotal experience.”

Some of that hard data Dr. Braddock refers to appears in the study, “Girls and Boys in School; Together or Separate?” (Cornelius Riordan, Teachers College Press, New York, NY). Riordan’s findings are based on studies of single- and mixed-sex Catholic schools in the United States. They purport to show that black and Hispanic males develop a stronger sense of environmental control (what Dr. Braddock calls “fate control”) than do their counterparts educated in coed schools, and

that single-sex schools do indeed provide more successful role models for students. "By and large," the Riordan findings make clear, "the weight of empirical evidence favors single-sex schools in terms of academic outcomes."

There is, too, Dr. Braddock believes, ample historical evidence over centuries that makes the case that exclusively all-boys schools and exclusively all-girl schools have served students and society well.

### "Afro-Centric really means 'Multi-Cultural'."

On the matter of curriculum for such schools, he feels it should be "multi-cultural." "That is really what 'Afro-Centric' means. The term 'Afro-Centric'—to those who understood the concept from the beginning—has always meant 'multi-cultural'."

Dr. Braddock holds little hope that the experiment in Baltimore can ever be anything more than a pilot. On this point he agrees with Dr. Slavin: "We cannot replicate the program system-wide in Baltimore because we cannot realistically hope to provide a sufficient number of black male role models to satisfy the needs of the program."

He concludes, "The idea of all-male, all-Afro-American schools for black boys is a promising one, and I believe we should think seriously about establishing a version here in Baltimore that will serve as a laboratory."

Whatever the doubts about the program, recognition of its potential value was given a sharp and positive boost recently when the New York City School Board of Education announced that it is preparing to establish an experimental high school with a special emphasis on "the problems of young black and Hispanic men." To be known as the Ujamaa Institute, the program does not go as far as Milwaukee's, but it comes close.

The school's mission is to address the anti-social forces such as crime and drugs and the dropout problem that are proving so destructive to the lives of black boys. Though advocates of the school say they are philosophically opposed to a single-sex or single-race school, at the same time they feel a critical need to address the social problems that appear to affect black and Hispanic men more than other groups, and that special, dedicated courses at Ujamaa will allow them to focus on such

problems. "These courses," an elected official working on establishing the program has said, "are no more sexist than having school football or basketball teams that promote some positive bonding."

The institute will be offering a multi-cultural curriculum with an emphasis on the history and culture of people it believes have most shaped American life: African American, Indians and people from Spain, France and England. There will be an emphasis on the study of jazz, which this same official says, is an "idiom that has grown out of the black experience."

Ujamaa Institute is planned to open next fall with 300 to 400 students in the Crown Heights section of Brooklyn at Medgar Evers College.

And here in Baltimore, with the tacit approval of the Baltimore City School Board, a modest version of the idea (27 boys, one grade—third) is in its second year at the Matthew Henson Elementary School. Principal Leah G. Hasty, aware of the questions surrounding the program, echoes the view, and the tone, of Peterkin and Holland: "We had to do something to put a positive role model in the classroom all day long."

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The Milwaukee and the Ujamaa programs are still in their infancy; the first students will not be in their classrooms until the fall of 1991—at the earliest (assuming they survive the challenges against them). The Matthew Henson experiment will not begin to be evaluated until later this year. No one, then, for or against the idea, can use data to substantiate a position at this time. Nevertheless, the issue needs to be debated.

In the exchange of points of view, it is important to consider the separate elements:

- In a city like Baltimore with a public school system that is 82 percent black, most schools are already 100 percent black. In these situations, it makes no point to decry what some refer to as the program's built-in "resegregation." Having a school where the student body would be characterized as "black" would not be creating any new and sensitive situation.

- Dividing classes by sex involves no cost and could be accomplished immediately. Baltimore already has an all-girl high school (Western). If, in fact, boys and girls learn better when educated separately (allowing for variance by age),

then the question may well be asked, "Why are they not educated separately?" The question of the advantage of single-sex education versus coeducational should be studied against the background of available data.

- A third element is a male teacher. Again, does having a male teacher in the situation make a difference? This should be determined, and if it does make a difference, efforts should be made to attract more male teachers at the appropriate grade levels.

- And finally, the question of the value of "Afro-centered" and "multi-cultural" curriculum: the terms need defining, the effectiveness of such curriculum emphasis evaluated.

Given the tragic dimensions and portent of the social situation of black boys in Baltimore today, it cannot be too soon for the community leadership to debate the idea.

If, as former Milwaukee School Superintendent Dr. Robert Peterkin says, "A population is dying," now is not too soon.

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## Abell Salutes

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effort in 1988. That effort includes the development, individual-by-individual, of a close, personal relationship with each of the participating students, providing counseling, tutoring, mentoring, a summer program at Morgan State University, and SAT preparation, job opportunities, cultural activities and scholarship development.

McFadden has figures that show that EOP works. "In our first group that eventually involved 66 students from 1986 to 1990, 51 have graduated from high school, six more will complete high school within the year, 49 have been admitted to college, four more are expected to go. The number of students in the school from a similar size group who would likely be accepted to college prior to EOP would be about six or so."

Last fall, based on the success of the Class of 1990, two new groups totalling 120 Lake Clifton-Eastern ninth graders were enrolled in two EOP replications.

The Abell Foundation joins the community and its leadership in recognizing the creativity, energy and dedication of those who are making EOP a program that works.

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## Abell Salutes: "Parent Aides Nurturing and Discovering with Adolescents" (PANDA)

### *Volunteers Are Helping to Break the Cycle of Child Abuse*

At about 10:00 o'clock on a Wednesday morning, a young woman, Sara Walters, knocks on the door of a row house on Fremont Avenue in West Baltimore. Responding, 17-year-old Tanya Smith answers; folded in her arms is her son—one-month old Tony. Mother and son are both crying.

Sara will soon discover that each is crying for a different reason: Tony is hungry; his mother is overwhelmed—and angry. A victim of child abuse herself, she is on the edge of abusing her own child.

Sara is a volunteer for Parents Aides Nurturing and Discovering with Adolescents (PANDA). PANDA is a program created by Parents Anonymous of Maryland. It is a statewide nonprofit organization of parents, children and family care professionals who have joined together to find answers to the problems of child abuse.

Finding answers begins with questions. Sara asks Tanya, "Do you hold the baby when you feed him?"

"Sometimes I just prop the bottle in the crib."

"You have to remember that Tony is still very little. He can't call out to you if the bottle falls, or if he gets too much and he chokes. Also it's soothing and comforting to him if you hold him."

"But I get so upset with him. When he wakes up at night I'm tired. So I just prop the bottle. He's just bad and he makes me mad!"

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## Maryland's New Bioprocessing Facility

### *Maryland Takes the First Step In a Leap of Faith; At the Far End of It Could be Ten Times the Jobs and Tax Revenues*

The biotechnology industry in Maryland, according to the North Carolina Biotechnology Information Center, currently employs 4,000 and generates an estimated \$10 million in state, county and local taxes. The Maryland Department of Economic and Employment Development asserts that this could grow to 40,000 jobs and \$100 million in taxes by year 2000—if Maryland can maintain its share of the market and if sales within the industry grow 20-fold in 10 years, as anticipated by Ernst & Young in its 1990 report, "Biotech 91: The Changing Environment."

In order to reach that potential, however, Maryland must make a leap of faith: it must develop the infrastructure to foster the growth of biotechnology companies, including financial and technical assistance. One particularly important element that is needed is production or "scale-up" assistance, to help small firms move from the lab to the marketplace. Because Maryland's biotech industry is made up of companies that are young and small, their resources are limited; they are not prepared to meet the costly and complex manufacturing and marketing demands associated with anticipated growth in the industry. The consequence is that in order for these young, small Maryland companies to move their products into the market they may have to enter into joint ventures with or be acquired by larger biotechnology or pharmaceutical companies, or hire expensive contract manufacturing firms. Either case is problematic for Maryland because it results in the export of money, jobs and future revenues to companies located in other states and

limits the growth of the industry within the state.

But in June 1991, the state legislature took the first step toward that long leap of faith; it voted to fund the design of a bioprocessing plant here in Maryland.

The facility will provide Maryland's mostly small biotech companies with access to the physical manufacturing facilities they need but can't afford, and the technical expertise they have not yet developed; it will provide, too, incentive for Maryland's biotech companies to remain here and for others outside of the state to locate here.

All in all, the facility opens the door of opportunity for the state to help realize the full and bright promise of its own, fledgling biotechnology industry.

The opportunity could not come at a better time.

Maryland already has a head start on the venture; the state, through the National Institutes of Health and Johns Hopkins University, is already in the forefront of receiving federal dollars for life sciences/biotech research. In addition, Maryland is home to the Federal Drug Administration (FDA) and the University of Maryland Medical System, the two major agencies affecting the future of the biotech industry. And, according to the Ernst & Young study, Maryland ranks in the top five states in terms of number of firms, sales and employees in the industry nationwide. But the flying start Maryland enjoys grinds to a slow stop: Maryland's biotech firms are for the most part small ones; for them to grow into the size where they make a difference in the Maryland economy they

need support. That is where the bioprocessing facility recently authorized by the legislature comes in.

### Why Is It Needed?

Most small-scale Maryland firms cannot afford their own scale-up facilities and may be forced to do manufacturing outside of the state, either through being acquired or joint venture, or through very costly contract manufacturing which will inhibit profitability.

A small-scale, research-oriented firm facing the need to scale up a product in sufficient quantity for FDA clinical trials is unlikely to have the capital to build its own pilot plant and will, therefore, be forced to either contract out manufacturing or sell out to out-of-state pharmaceutical companies. In such cases, the manufacturing of products based on Maryland research and the jobs and taxes that go with them are likely to go out of state. Additionally, future profits resulting from the development of these newly manufactured products will have to be shared by these other players, limiting the growth and profitability of the Maryland companies.

### What Is It?

It is a 30,000 square-foot, FDA-licensed, shared-use light manufacturing facility which will make available highly specialized and controlled equipment, procedures and technical assistance. The facility is to be built in Baltimore City or Baltimore County and will offer pilot-scale manufacturing capabilities for several biotech firms at one time. Individual suites will provide confidentiality and control cross-contamination. A technical staff is available to provide a range of assistance, including guidance with product development, resource referral for business development issues, linkages and networking with other biotech companies, staff training, and assistance with a variety of FDA

regulations. It will be governed by a board of directors consisting of leaders from the public and private sectors. First preference for usage will go to Maryland firms; out-of-state firms, when space is available, will be permitted to rent space but at a higher rate than local firms.

### How Much Is It Costing the State and Where Will the Money Come From to Pay For it?

The facility, which will cost \$22 million to build and equip, requires a highly specialized and regulated building of which equipment is an essential feature. The source of funds is the following:

- \$17 million from Maryland for design (\$1.5 million), construction (\$10 million) and equipment (\$5.5 million)
- \$5 million from federal and private sources for start-up costs (including FDA-required trial runs on all equipment)
- \$900,000 in donated land
- \$2 million from users and industry for annual operating costs. User fees, like space charges in an industrial incubator, would represent a subsidized rate below what the company would have to pay on the open market.

### What Are the Alternatives?

Recognizing the need for such a facility, many private sector firms have attempted to capitalize on the demand but have had limited success. Because the costs of building a bioprocessing facility are exorbitant (due to stringent FDA regulations), the private sector has not been able to recoup both capital and operating costs in addition to turning a profit.

The few contract bioprocessing opportunities that are available for small companies are actually excess space and equipment in existing biotechnology manufacturing plants of larger pharmaceutical companies. Unfortunately, it is difficult to identify and schedule time at these facilities. Smaller biotech companies are often "bumped" if the host firm needs to use the

scale-up facility, and the smaller companies must often share highly proprietary information at great cost.

The Maryland Bioprocessing Facility will be unique in the country in that it will be the first nonprofit, contract manufacturing facility available exclusively to small biotech companies. Because the facility does not need to pay for capital costs or turn a profit, it will only need to charge as rent an amount needed to cover its operating costs. The only similar facility in the world is located in Montreal.

### What Can Maryland (and Marylanders) Expect From It?

Initially, the facility will provide an opportunity for Maryland's emerging biotechnology firms to manufacture limited amounts of their product for testing and clinical trials. Over the longer term, the effort will provide a critical piece of a larger biotechnology infrastructure within Maryland that will help to retain, develop and attract a significant biotechnology industry into the state.

In return for its investment, the state will be retaining firms; additionally, it is likely that the facility will attract other firms from across the country and globe. If the biotech industry in Maryland can grow as anticipated, its companies will have the opportunity to produce up to \$4.5 billion in sales, 40,000 jobs and close to \$100 million in state, county and city taxes in the next decade.

### How Do Entrepreneurs In the Business Feel About the New Bioprocessing Facility?

Henry Linsert is chairman of the Martek Corporation in Columbia, Maryland. His fledgling company is in the business of manufacturing oil from micro algae that provide certain key fatty acids found in breast milk and not contained in infant formula today. The potential for the company's product worldwide is highly promising.

"In this project we have had to allocate a couple of million dollars out of a budget of maybe \$5 million to scale up—and providing facilities for an economical

scale-up is what this new bioprocessing plant is all about. That is a lot of money for us to raise and spend. We require large fermenters (stainless steel 'pots' with controls used to grow microbes by fermenting them) and if we had them we would not have to go out and find the funding to build them. The difference between having the bioprocessing plant here in Maryland and our having to go out of town to avail ourselves of the facilities comes down to something like this. If a bioprocessing facility were, say, at University of Maryland Baltimore County 15 minutes away, our people could go back and forth easily. It would be convenient, more economical, and would allow us to produce in large amounts in compliance with the government's standards of good manufacturing practices sufficient to meet FDA requirements for marketing. We would be up and running faster."

Dr. M. James Barrett is president and CEO of Genetic Therapy, Inc. in Gaithersburg, Maryland. The company is still in its research and development stage but hopes to develop products for commercial use. Dr. Barrett's perspective on the value of the facility is that it lies within the state's overall and growing biotech infrastructure. "It's another but a large piece of the whole. I think if the state does a good job and gets the facility running well it is going to get decent use, and that usage is certainly helpful to those doing the using. Would Genetic Therapy as a user of the new facility stay in Maryland when and if we get a successful commercial product to market? I can't really say that just because the facility is here in Maryland that circumstance by itself would make us stay in Maryland. I will say that if it is here and meets our needs we would use it, and if that arrangement worked out well the good experience would have a positive influence on our decision to stay. The state is doing a lot for biotech companies, and we would look with strong interest at that hospitable environment."

Christopher Price is vice president of business development at Nova Pharmaceutical Corporation in Baltimore. He views the bioprocessing facility as not only keeping Maryland's biotech compa-

nies in Maryland but attracting others from out-of-state to locate in Maryland.

"Both things are going to happen, I believe, not only as a result of a combination of the bioprocessing facility's being in place here but also because of Maryland's improving biotechnology infrastructure. And among those out-of-state companies that may be interested in coming to Maryland are those in Europe and Japan as well. A recent example of how this is already happening is Otsuka Pharmaceutical, which has set up a research facility in Maryland. I think that when these companies get up and running there will be a great deal of 'value addition' occurring. There will be improvements in fermentation; there will be problems solved in purifying compounds; there will be relationships built up with biotech personnel and with other parts of the Maryland infrastructure such as packaging. All that familiarity is not likely to be abandoned. These Maryland companies are going to develop comfort levels with respect to people and service opportunities, which will act to bind them to Maryland.

"And the truth of it is, Maryland's facility will have no competition. Arkansas and New Jersey have tried to do it, but failed. We in Maryland are alone, unique. For Maryland, the way is wide open."

### **What Are the Problems? What Do the Program's Critics Say?**

In the euphoria, there are concerns. Linger- ing questions remain.

Is the program welfare dressed up for the rich—as some of the program's detractors would have it? Does it take monies that might be used for the poor and the disadvantaged and use it to finance the rich? If a business cannot make it on its own in the very same free market that business clamors for, why should public money rescue private enterprise?

An answer is that effective and efficient efforts that promise to create jobs within a community are in fact helping every sector of the community.

A more pressing question, and one that would appear to be more easily answered, is the fragility of the program's objective: if in fact the program is being set

up to grow small companies into big ones in the hope that they will remain in Maryland as a payback, what assurances are there that the recipients will in fact carry out their end of the "understanding"? Opinions are mixed.

Henry Linsert, answers the question this way. "If we got on the road because Maryland helped us get there, would we stay in Maryland? It's hard to say. We would hope to, but we'd have to go where we could to get access to a fermenter large enough to meet our needs as they grew. A bioprocessing plant here in Maryland would surely keep more start-up companies in Maryland than if the state didn't have the plant. It should certainly help. Look, if that processing plant were up and running here in Maryland today, I would be looking to cut a deal with the state to do a scale-up. That deal would keep me close to Maryland today, and in my plans tomorrow. In the end, it's hard to say."

But Dr. Hans Mueller, president and CEO of Nova Pharmaceutical Corporation, is quite positive about the program's potential as an incentive for companies to remain in the state. "The physical proximity of the key assets of a company is important since the arrangement it allows improves operational efficiency. The interaction of the bench scientists with the scale-up team is frequent and intensive—and on-the-spot. This interaction is crucial for product development. While the facility provides no guarantee that the state will retain its biotech firms, and equally important, attract new firms, it nevertheless is an important step in the competitive race against other states with equally determined efforts to win 'industries of the mind'."

The question cannot really be answered at all because only time will tell. But knowledgeable observers in the business are confident that bread-on-the-waters comes back. And Maryland legislators clearly hope that Maryland's biotech businesses, entrenched in Maryland and enjoying the benefits of that entrenchment, will stay in Maryland.

And lastly, and perhaps peripherally, is the question of whether the state, in building the bioprocessing facility out of the public sector, is in fact competing with

private industry—which might be looking for the same business but would be eliminated from doing so.

The answer to the third question is academic; there is, in the country, no precedent for private sector success in building bioprocessing facilities. Private sector economics simply don't work in this area; small-scale biotech companies can't afford the fees private firms require to cover their operating and capital costs, and still make a profit.

### The Window of Opportunity

Maryland, among the top three states in number of biotechnology companies along with California and Massachusetts, has the potential of becoming the Silicon Valley of the biotechnology industry. The presence of the National Institutes of Health, the Johns Hopkins Medical Institutions, the Maryland Biotechnology Institute, the Federal Drug Administration, the University of Maryland Medical System and over 100 corporations related to this industry provide the expertise that continues to draw the industry to this area. Today, however, biotechnology has matured from its research stage and stands at a critical crossroads in its development. In order for Maryland's investment to pay off in the long term, it must provide the infrastructure and support systems necessary to insure the industry's smooth transition from research to manufacturing.

According to the report by Ernst & Young, biotechnology scale-up manufacturing is considered the most important issue facing biotechnology firms today. Additionally, 75 percent of the companies represented in the report plan construction of new, full-scale manufacturing facilities within five years while the industry projects that the number of marketing personnel will triple.

The Maryland bioprocessing facility is undoubtedly going to provide the ideal medium for introducing a variety of biotechnology firms to the merits of locating and/or expanding Maryland. Immediately, it is going to help Maryland firms grow into international leaders; in the long term, at the far side of the leap of faith, could be the new jobs, the additional revenues, the diversified economic base—and the State of Maryland in the position as the nation's biotechnology manufacturing center.

### Abell Salutes: PANDA

(continued from page 1)

It is the Tanyas of the world—bewildered and frustrated at the circumstances they suddenly find themselves in and taking out that anger on what (more often "who") they perceive as the source of their frustration that PANDA seeks to reach, with one-on-one, in-home counseling, support groups and a special emphasis on nurturing. Executive director for Parents Anonymous is Elaine Fisher; program coordinator for PANDA is Bonnie Elward. Long term, the program, which is modeled after similar Parents Anonymous programs around the country, seeks to prevent repeat pregnancies, promote academic achievement and parenting skills, and improve the level of self-esteem among adolescent parents.

Historically, while not everyone who was abused becomes abusive, most parents who abuse their children have had difficult childhoods; they respond to their children's cries for help in a destructive way—as their own parents did. It is at this point that PANDA intervenes—looking to break the cycle.

Society is just beginning to recognize that many negative social behaviors of children—delinquency, substance abuse, poor school performance, learning and emotional disabilities, running away, dropping out of school, pregnancy out of wedlock—may be the consequences of having been abused.

How well does the PANDA program work? During its three years in operation, a similar program in Prince George's County has served 100 teens and their children. Among these teens, there are only two repeat pregnancies. The majority of these teens returned to school, finished school, or completed their GED, and several went on to enroll in college or job training programs. It costs Parents Anonymous approximately \$1,000 to provide its services to each child; it costs approximately \$30,000 to house one prisoner.

By providing care to Tanya, the PANDA volunteers are helping to assure that her baby son, Tony, will never need them.

### Some Recent Grants By The Abell Foundation

**Associated Black Charities** \$58,750  
Challenge grant for a study of the operational and organizational structure, philosophy and performance of the Administration of the Baltimore City Public Schools.

**Baltimore Mental Health Systems, Inc.** \$16,957  
To support the enhancement of the Client Information System, a computerized data base that collects information on children, adolescents and adults served by the public mental health system in Baltimore City.

**Appalachian Trail Conference** \$12,500  
Challenge grant toward the cost of an inventory of land abutting the 40-mile section of the Appalachian Trail in Maryland to be used for a strategic plan to protect a greenway corridor.

**Magic Me** \$14,850  
For production costs of a pilot video to introduce black role models to students in Baltimore City Public Schools.

**Morgan State University** \$150,000  
To provide second-year funding for the Center for Educating African-American Males. The center's program is designed to recruit and train teachers to take their places in experimental schools. In the schools, an exclusively African-American male faculty and an all-African-American male student body will have the mission of demonstrating that such an educational environment works to keep young African-American males in school and in the workplace.

**Planned Parenthood** \$73,357  
Matching grant for the development and implementation of a pregnancy prevention program for teens who have received a negative pregnancy test.

**Baltimore City Public Schools/  
Samuel F. B. Morse Elementary School** \$50,080  
To supply computer equipment needed to test the educational impact on a computer lab based on the Digicard network and philosophy. Using the lab, the teachers will have more control over the use of the computers and will be able to more closely coordinate computer time with regular classroom instruction.

**Maryland Department of Health  
and Mental Hygiene** \$93,455  
To cover costs of training staff to introduce Norplant contraceptive technology to the Maryland public health system.

**Marylanders Against Handgun Abuse** \$8,180  
For the production of one radio and one television public service announcement to educate Marylanders about the impact of handgun abuse on children and to discredit the notion that handguns are for "self-defense."

**Towson State University** \$76,334  
To supply a support and training program for 25 returning Peace Corp volunteers in preparation for teaching in Baltimore City Public Schools.