

Lucent did—networking and optical communications. That gives us an additional outlet. Research scales with revenue. In that vein, it's better to be part of a bigger company."

A fine line

If the company is successful, it "will give us more flexibility, more money for fundamental research," says Kim. "I am passionate about trying to protect fundamental research. But at the same time, I want to make sure we do this by making a difference for the company. It's a fine line to walk."

"One of the important contributions of AT&T and the early Lucent, and IBM

and others, was that research got published in the open literature," says the New Jersey Institute of Technology's Louis Lanzerotti, who used to work at and still consults for Bell Labs. "When you have fewer publications from industry, other physicists don't know what are deemed to be the important problems. That's not good for physics, for the country, or for the world." Stan Williams, director of quantum science research at Hewlett-Packard, agrees that the decline of basic research at Bell Labs and other companies is unfortunate: "I have been so disheartened by the whole thing. I view it as a great American tragedy."

Toni Feder

Dylla tapped to head AIP

H. Frederick Dylla will don the mantle as CEO and executive director of the American Institute of Physics on 1 April, after a one-month overlap with Marc Brodsky, who has steered the institute for more than 13 years (see *PHYSICS TODAY*, July 2006, page 22). A not-for-profit organization with 450 employees and an annual budget of about \$75 million, AIP publishes scientific journals, conference proceedings, and magazines—including *PHYSICS TODAY*—and provides a range of services to its 10 member societies, individual scientists, students, the general public, and R&D leaders.

Dylla comes to AIP from Thomas Jefferson National Accelerator Facility (JLab) in Newport News, Virginia. Before moving there in 1990, he spent 15 years at the Princeton Plasma Physics Laboratory (PPPL).

"At Princeton, Dylla solved the wall problem for the tokamak—he learned how to clean the walls to stabilize them under ion bombardment from the plasma," says Xerox Corp's Charles Duke, who chaired the search committee that selected finalists, from which Dylla was chosen by the executive committee of AIP's Governing Board. "When Fred moved to JLab to build a free-electron laser, he was hijacked on a crisis basis and asked to take over the fabrication and manufacture of the cryomodules for the main accelerator's beamline. He led the cryomodule team to deliver on time and under budget. He has been indispensable in getting two national laboratories operational." Dylla's taking the top job at AIP, Duke adds, "is a match made in heaven. He has proven to be an accomplished manager, an outstanding physicist, and an inspiring leader."



GREG ADAMS, JEFFERSON LAB

H. Frederick Dylla

Dylla also has strong ties to AIP. He served on the Governing Board in the early 1990s and again beginning in 2004. He has been president of AVS: Science and Technology of Materials, Interfaces, and Processing, one of AIP's member societies; is a longtime member of the advisory committee for AIP's Corporate Associates Program; is a founding member of the Forum on Industrial and Applied Physics of the American Physical Society (APS), another AIP member society; and, until accepting his new job, was serving a stint as chair of *PHYSICS TODAY*'s advisory body.

Despite his long career in national labs, Dylla calls himself an "industry junkie." As an experimentalist, he says, "you are constantly involved with small and large companies as you try to build frontier instruments." In addition, with a couple of his PPPL colleagues, he

launched a consulting company and was its president for a decade. During his tenures at both PPPL and JLab, Dylla was involved in developing and implementing science education and outreach programs for elementary and secondary school students.

"The only thing you might think I'm weak on is the publishing business," says Dylla. "But through being on boards at AVS, AIP, and APS, I've been instilled with all the sensitivities and issues." And, Dylla adds, "difficult situations don't bother me. I enjoy challenges."

In considering the challenges facing AIP, Dylla points to the need to respond to rapid changes in publishing, including open access, electronic publishing, the growing East Asian market, and increasing competition from European journals. "I am optimistic that publications will remain the mainstay of AIP's business," he says. There will always be a market for publications that are high quality and nice looking, peer reviewed, and archival, he adds. "AIP can afford to do low-level experiments on open access and different distribution methods. You are not betting the farm."

Another challenge, he adds, is how AIP and its member societies can "be responsive to industrial members. There is no physics industry—unlike the American Chemical Society, which can point to a chemical industry. But physics still underlies the design and manufacture of semiconductors, which is the biggest business in the world. It still underlies energy technology and building cars. It's just that the scientists in the boardroom have been replaced with MBAs."

The job of heading AIP "is to first-order impossible," says Governing Board chair Mildred Dresselhaus, a physicist at MIT. "You have to be involved in everything. Publishing is a big factor, and all the resources we [at AIP] provide—education, statistical services, history of physics." Dylla, she continues, "is unusual in that he has experience that spans quite a number of fields of physics. That is an advantage in a job like this." AIP is doing well as a whole, she adds. "There is a good base to build on."

"In my first few months," says Dylla, "I will be extensively listening and asking questions. I am going to help various groups think about who their customers are, what are their deliverables, how they are using their resources. You will find me to be a manager who doesn't dictate things from the top, who helps the organization develop its own solutions,

facilitates problem solving, and keeps people from becoming discouraged when they bang their heads against the wall." He adds that he will work to make sure any tensions between AIP and its member societies "are creative tensions."

For his part, Brodsky says he is stepping down because "I want more time

for myself. In a job that is as demanding as this, it's very hard to have personal time." He is looking forward to traveling for pleasure—rather than for business—and going to museums and the theater, and says he has "an unbounded amount of photography I want to pursue."

Toni Feder

Progress and problems with Middle East light source

Assembly of SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) is set to begin this spring now that a building for it is nearly ready in Allaan, Jordan. But progress on the light source was overshadowed recently when a group of scientists from Iran was not granted visas to attend a users meeting in Egypt.

SESAME formed around a gift from Germany: BESSY I, a decommissioned light source, will provide the 0.8-GeV booster synchrotron injector system (see PHYSICS TODAY, August 2002, page 27). SESAME is supposed to open for science in 2010. It will be a 2.5-GeV machine and is designed for a stored current of 400 mA, although if funding is tight, it may start off with a lower current.

In December the International Atomic Energy Agency committed \$750 000 over four years mainly for training scientists to use SESAME. And last October, the European Union said it will give the project €1 million (\$1.3 million). This money may help persuade the US and Japan to support SESAME, says the project's council president, Herwig Schopper of CERN.

Not counting Germany's gift of the old synchrotron, or the building and site, which Jordan provided, "the cost to realize the machine—not including the beamlines—is about €15 million," Schopper says. The annual budget, which is paid by member countries, will increase from about \$1 million now to \$4.5 million when the machine starts up, he adds.

Last summer, Cyprus became the eighth member of SESAME—making it a rare project on which Cyprus and Turkey are collaborators. The other members are Bahrain, Egypt, Israel, Jordan, Pakistan, and the Palestinian Authority. Iran has been involved since the outset and is expected to become a full member.

But in November, 35 Iranian scientists did not receive their visas to attend a users meeting in Alexandria, Egypt. The ensuing brouhaha underscores the importance of SESAME's dual mission to facilitate both science and friendship in the Middle East.

Undisputed is that the Iranians had applied and been accepted to the meeting and they had reserved and in some



SESAME begins moving into its new building in Allaan, Jordan, this spring.

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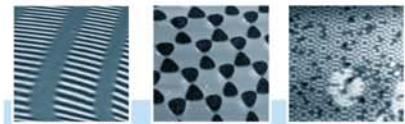


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