P E N N S Y L V A N I A
EARLY STAGE PARTNERS
A Safeguard Scientifics Fund

George Mason University's Institute for Public Policy Workshop
Performance Metrics for R & D Organizations
Session IV: Directions in the Private Sector

Michael G. Bolton
Managing Director
435 Devon Park Drive
Building 400, Suite 415
Wayne, PA 19087
Phone: 610-293-4075
Fax: 610-254-4240

PA Early Stage Partners Fund Strategy and Investing Guidelines

Basic Strategy:

There are attractive venture capital investment opportunities in start-up and early stage companies in Pennsylvania which are currently being lost without a substantial, professional source of venture capital located in the Commonwealth. Pennsylvania Early Stage Partners (PA-ESP) was announced in January, 1998 by Governor Tom Ridge as a collaboration between Safeguard Scientifics, the $44 billion Public School Employees Retirement System (PSERS) and the Team Pennsylvania Foundation (Commonwealth of Pennsylvania) to address this need.

Investment Guidelines and Strategies:

1. Start-up, early stage and catalyst stage companies with special opportunities for exponential growth, located primarily in Pennsylvania (80% or more of deals).

2. Strong emphasis on technologies identified in the Commonwealth's Technology 21 Report.

3. Select portfolio companies with the following:
    *   High potential for rapid growth with promising gross margins
    *   Compelling value proposition
    *   Strong business plans showing potential to be a market leader or to create a new industry
    *   Leverage new technology and/or productivity enhancements
    *   Solid management teams
    *   High potential for a Safeguard rights offering, IPO or acquisition

4. Most investments per company will be in the range of $250K to $2.0M (Note: this assumes 100% reserve for follow-on investments after first round of investing).

5. Leverage Safeguard's deal flow, professional services, expertise, deal champions, spin-off expertise, positioning strategies and other resources.

6. Leverage investment opportunities and spin-offs coming from Safeguard companies, angel networks, research centers, Fortune 100s, universities, Ben Franklin Centers, Technology Councils, Small Business Development Centers, etc.

7. Build close working relationships with banks, law firms, accounting firms, consultants and other professional service providers.

8. Make sound investments while linking PA-ESP to the Commonwealth's interests and strategies:
    *   Increasing flow of investments in seed/early stage companies
    *   Support of entrepreneurs and angel investor networks
    *   Regional distribution of investments
    *   Coverage of six technologies identified in Technology 21 Report

PA Early Stage Partners Fund Information

Fund Inception Date: October, 1997

Fund Announcement Date: January, 1998

Fund Commitments

Safeguard Scientifics, Inc.		$10,000,000
Team Pennsylvania Foundation		$10,000,000
Pennsylvania State Employees Retirement System		$30,000,000
	TOTAL	**$50,000,000**

Portfolio Activity as of 3/2/98:

Number of investments	14
Investment commitment total	$16,400,000

Fund Staff:

Michael G. Bolton - Managing Director
Stephen L. Amsterdam - Principal
Rob M. McCord - Principal
Leslee G. Petrondi - Office Administrator
Kevin Flanagan - CEO in Residence
Dean Miller - Wharton Intern (part-time)
Scott Nissenbaum - Analyst
Jenay Ryan – Assistant

Portfolio Companies:

Company	Website	Contact
AANetcom, Inc.	www.aanetcom.com	Kal Shastri
Argus Networks	www.argusnetworks.com	Dave Jannetta
Arista Knowledge Systems	www.aristasys.com	Sam Poole
Destiny Software	www.destinysoftware.com	Lucinda Duncalfe
Electric Schoolhouse	www.electricschoolhouse.com	Tom Schoemaker
eVend.net		David Goodman
Interactive Commerce Group	www.intermerce.com	Vince Schiavone
Maxwell Systems, Inc.	www.maxwellsystems.com	Bill Maxwell
PhotoTronics Corp.		Jim Ionson
PRWT ComServ, Inc.		Ray Saulino
QuestOne Decision Sciences	www.questone.com	Keith Krenz
STORM Systems, LLC	www.stormsystems.com	Sam Leinhardt
STC Technologies, Inc.	www.stctech.com	Mike Gausling
Vcall	www.vcall.com	David Bauman