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Under the Microscope

REPORT

LOOKING AT BIOTECH MUTUAL FUNDS

here's the Bottom? Where's the Top?

GILDER

The biotech sector has been marked by cycles of boom and bust ever since its inception. Remember the early days, with the debut of companies such as Genentech (DNA), Biogen (BGEN) and Amgen (AMGN)? It's true that viewed over the long run the sector's trajectory has been mostly up. But it's still been a wild ride.

To be sure, the Amex biotechnology index leapt 62 percent in 2000, coinciding with the height of the genomics boom, only to fall back even farther, faster. For those with longer memories, there were the magnificent gains that investors pocketed during the early 1990s, stoked by companies such as Amgen and Repligen (RGEN). That same party ended badly for those late to the ball. But investors who stuck it out for the long run fared much better.

That's because booms have inevitably given way to long nuclear winters, like the one we're in now. These three- to five-year boom-to-bust cycles have been in biotech for twenty years and are the nature of biotech investing. True, as the industry matures, it will continue to rise over time, but until the balance of these companies becomes profitable, they will still be subject to wild gyrations on their way up. Without profits, they trade on emotion and expectations, and, as you know, both of those currencies can be fleeting. But no matter how gloomy the current cycle seems, we guarantee that it will turn, and investors who bought at the bottom will be grateful.

Where's the bottom? Where's the top? It's hard to tell. But rest assured, the market has been beaten up badly, and the upside far outweighs any lingering downside.

Take a page from the investment bankers and their clients who time these boom-bust cycles with cunning precision, raising equity when the markets are hot in order to fill biotech company coffers for the cold cycles. Companies can't afford to wait and raise equity when they truly need it. They need to strike when the markets are hot. The biotech companies that sat out the last cycle are precisely those that now find themselves either disintegrating or fleeing into the arms of flush suitors.

This is how the biotech industry has been played on Wall Street, often at the expense of retail investors who end up buying shares at market tops, only to ride them down. The best way to play these boom-andbust cycles is to buy at the bottom and ride stocks up the inevitable turn. Right now, shares in many biotech stocks have never been cheaper. The



Dr. Scott Gottlieb

We look at all the mutual funds that claim to be biotech-focused and try to find some that rise above the pack.

INSIDE:

PAGE 2: Biotech-focused funds PAGE 2: Back of the pack PAGE 3: Making the grade Amex biotechnology index, a group of seventeen stocks created in 1991, is down 38 percent this year, versus the S&P's 23 percent decline. The broader BioCentury 100 Index traded down 49 percent, while the BioCentury London Index closed the year down 57 percent, close to the mid-1995 level, and the BioCentury Europe Index was down 62 percent for the year.

But while biotech stocks rise and fall daily with the overall sentiment in the technology sector, moving along with the NASDAQ, their broader cycles are guided by their own internals, moving up and down in groups on scientific news and genuine medical breakthroughs. In that sense, the broader markets could have another bad time next year, while the biotech sector could still rack up handsome gains.

That's why the biotech sector has recently been drawing attention from professional investors on Wall Street. Not to mention there's been a continual rotation out of technology stocks—and really out of the rest of the market—into health care as a "defensive" investment. The reasons are obvious. Although the rotation into biotech has cooled after a spate of negative news in the fall beginning with the ImClone (IMCL) debacle—a string of positive scientific announcements could quickly herald its return after winter's end. After all, the spring and fall are when the major market-moving medical meetings are held. And as some begin to whisper that inflation might re-emerge, drug companies start to look even more attractive, since they still have pricing power in these kinds of environments.

The art, of course, is picking the right basket of



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biotech stocks. The *Gilder Biotech Report* provides one guide of companies that embodies genuinely better technology. For the feint of heart, more inclined to spread the risk over a bigger basket of stocks, we realize that mutual funds can provide the best kind of exposure. We haven't found any mutuals we love, largely because these funds are forced not only to buy the "hot" stocks but also to invest in the same basket of big-cap biotech companies in order to spread around their bloated portfolios. They spend less time looking at the underlying technology than we'd like and more time focusing on finding trading plays. That said—some mutual funds are clearly better stock pickers than others.

A Look at Biotech-Focused Mutual Funds

To kick off the New Year, just in time for the annual reappraisal of retirement accounts, and in synchrony with the seasonal labor of re-deploying stale assets, we decided to take a departure. In this issue, we look at all the mutual funds that claim to be biotech- focused. And try to find some that rise above the pack.

What kinds of screens did we use? There are less than a dozen mutual funds that invest exclusively in biotech. We'll stick to these pure-play funds. First, a few ground rules:

We prefer funds actively managed by seasoned investors who are inclined to look for unloved companies with a history of good technology stories or interesting products. We also prefer funds that have good research teams and managers with long track records or deep experience in the sector. For that matter, we like funds that have been around for a while. And like all investors, we prefer no load funds with low-management fees and enough assets under management to provide portfolio stability.

Problem is, there aren't any funds that meet all these criteria, and so investors who want to buy mutual funds according to our standards will have to settle. We profile the four biotech funds we believe are closest to matching these specifications. But first, we'd like to break out a few interesting funds that missed the mark.

Back of the Pack

The Rydex Biotechnology Fund (**RYOIX**) looks less at the science behind biotech stocks and more at their trading fundamentals. The fund's management takes a quantitative approach, creating what Wall Streeters refer to as an "index plus."

The Rydex fund holds about seventy stocks, and, like an index fund, bases much of its buy-sell decisions on a company's market capitalization. The fund puts nearly 60 percent of its assets in the ten largest holdings. While this gives investors a lot of exposure to the biggest biotech names, there isn't a whole lot of intelligent stock picking going on. We would argue that this is a bad approach to biotech investing. This is a sector where there are clear winners and losers. It's a stock pickers market, not one well suited for indexing.

All of that said, the Rydex fund hasn't done much worse than any of the other pure-play biotech mutual funds. In large measure, that's because most of these funds end up concentrating their cash in the same big-cap names. The Rydex fund is down 44.79 percent over the last year and posts an average loss of about 15 percent over the last three years. It currently has approximately \$130 million in assets. Its top five assets are predictable: Amgen (which now represents about 18 percent of the fund's assets), Gilead Sciences (GILD), Neurocrine Biosciences (NBIX), IDEC Pharmaceuticals (IDPH), and Chiron Corp (CHIR).

The fund is a no load, but has a high \$25,000 minimum investment. It's currently run by a team of managers, some of whom are seasoned biotech investors. All in all, we would argue that the fund is better than those blindly buying biotech indexes since there's some cognitive work being done over at Rydex. But this fund wouldn't be one of our top choices.

The Murphy New World Biotech Fund (MNWBX) is one of the few purely biotech funds that's brave enough to hold many of the smaller-cap names and unloved biotech companies in lieu of buying all the usual ones. That's why we mention it briefly here. We decided not to do a longer profile of the fund because it's also been one of the industry's worst performers. We didn't think that track record merited the extra ink.

Indeed, while other funds tend to mirror the biotech averages or concentrate on the fashionable big-cap names like Amgen, Genentech, and Biogen, the Murphy fund holds such small-cap names as the lab-on-a-chip maker Caliper Technologies (CALP). Unfortunately, the latter is an example of the dozen or so companies in the Murphy portfolio that crashed over the last year, providing a drag on the fund's few better performers.

Two of the fund's top five holdings are our favorites: Gilead Sciences and Vertex Pharmaceuticals (VRTX). Unfortunately, the rest of the portfolio has been chosen with less acumen. Perhaps that's one reason why its assets are a paltry \$4.3 million. The fund's average -11.03 percent return for the last five years is well below its peer group, which posted a 5.4 percent gain over the same period.

The Murphy fund is even below the averages for the pure-play biotech funds, the ones that don't goose their earnings by buying a few pharmaceutical stocks and healthcare services companies. In that regard, Murphy has tried to pump up the portfolio's earnings, buying the healthcare services company Resmed (**RMD**), for example, a manufacturer and distributor of medical equipment. It's to no avail. It continues to underperform, down 6.31 percent over the last three months.

The Genomics Fund (GENEX) has been another bad performer, down 61 percent over the last year alone. We include it here because, like the Murphy fund, the Genomics fund concentrates on many of the smaller biotech companies rather than simply investing in the most obvious names.

The Genomics fund holds only twenty names. This kind of focus could provide favorable performance if the fund's stock picking skill picks up. Admittedly, among the fund's top five names are companies we like: Gilead Sciences, ISIS Pharmaceuticals (ISIS), Millennium (MLNM), and Vertex, with Genentech rounding out the bunch. And the fund holds some other names that we've followed, including Curagen (CRGN), Cubist (CBST), and Abgenix (ABGX). However, many of the other holdings we don't like very much at all, and still others have performed poorly, dragging down the portfolio's performance. Among them: Visible Genetics and Ribozyme Pharmaceuticals (RZYM), Protein Design Labs (PDLI), and Incyte Genomics (INCY).

While the fund has a poor record, we must admit that its portfolio holds its highest concentration in companies that we believe are poised for the greatest moves going forward. Aside from the stocks that overlap with our own watch list, this fund also holds Genta (GNTA) and IDEC Pharmaceuticals, two companies that we also like.

The year 2002 seems to have been a particularly bad one for Genomics. The fund's five largest reported buys in the first half of 2002 were Gilead, Genentech, IDEC, Genta, and Ligand (LGND). It bought Gilead and Genentech at rather high prices, after they had run up a bit. And it dumped a lot of its holdings in Curagen, ISIS, and Cubist, at near lows. Is this just bad portfolio management, bad stock picking, or both? It's hard to tell. Cubist and ISIS are each awaiting major developments that could significantly boost their shares. If the fund rode them all the way down, why sell now?

We don't know. And neither, it seems, does the fund's management team. Perhaps the worst aspect of this fund isn't its insight at uncovering the companies with the best technology (we believe it has some!), but its sense of timing as to when to buy and sell them. Nevertheless, the fund fits our pure-play mantra and also makes big bets on some of the unloved names, rather than buying the obvious Amgens and Biogens. As a result the fund offers maximum risk, but also maximum upside. Tread carefully.

Fidelity Select Biotechnology Fund

Telephone:	800-544-8888
Net Assets:	1,434.90 (\$mil)
Investment Minimum:	(initial/repeat): \$2,500/\$250
IRA Minimum (initial/repeat):	\$500/\$500
Purchase fee:	3.0%
Redemption:	0.75%

RETURNS AS OF 11/30/2002

1 Year:	-40.76%
5 Years:	8.11%
10 Years:	7.97%

Fidelity Select Biotechnology Fund Top Holdings

COMPANY NAME	# OF SHARES	CHANGE FROM PRIOR REPORT	% TOTAL
Gilead Sciences	5,562,500	-1,596,900	16.82
Biogen Incorporated	4,995,550	4,287,900	13.19
Amgen Incorporated	3,334,200	-2,148,300	12.54
IDEC	2,619,730	-1,391,610	9.81
MedImmune	3,654,220	-1,578,000	6.89
Genzyme	3,497,200	2,583,900	6.50
Cephalon	1,071,840	559,200	3.95
Invitrogen	1,268,710	-196,800	3.90
Celgene	2,422,420	0	3.68
Neurocrine	688,200	0	2.54
Trimeris	569,400	569,400	2.29
Vertex	1,024,060	-414,200	1.71
Scios	732,600	0	1.68
Chiron	516,200	516,200	1.63
Techne Corp	506,500	0	1.50
Enzon	848,500	0	1.47
Transkaryotic	391,800	317,100	1.15
Regeneron	939,000	0	1.14
CV Therapeutics	561,835	-1,057,255	1.06
Abgenix	1,729,500	-244,600	1.01
Shire	295,100	295,100	0.66
XOMA Corp	1,132,700	1,132,700	0.64
InterMune	188,400	-414,500	0.56
QLT Phototherapeutics	663,900	663,900	0.46
Alkermes	632,100	-905,300	0.45

Fidelity Select Biotechnology Fund Returns

YEAR	RETURN	RANKING	PEER GROUP	NAV
1993	0.70%	11 of 18	5.48%	\$28.61
1994	-18.18%	19 of 19	4.22%	\$23.41
1995	49.10%	9 or 22	48.36%	\$34.83
1996	5.61%	22 of 23	13.83%	\$32.51
1997	15.39%	22 of 32	21.01%	\$32.54
1998	29.72%	13 of 44	18.55%	\$39.77
1999	77.77%	4 of 51	15.60%	\$67.13
2000	32.75%	62 of 70	56.64%	\$86.80
2001	-24.98%	95 of 99	-11.58%	\$65.12

Making the Grade

Now for the funds we like, at least a little. We'll review them here in no particular order. Remember, there aren't any biotech mutual funds out there that meet all of our criteria. Investing in one of them will require a series of compromises.

We'll start with the Fidelity Select Biotechnology Fund (FBIOX), since it's the sector's oldest and largest. In our opinion, it is also one of the best, if you can look past its 3 percent load.

During the last five years, the Fidelity Select fund has delivered investors an average annual return of 6.72 percent, which is better than the 0.73 percent returns of the S&P 500 and is also moderately better than the 5.40 percent return of its peer group of funds. Keep in mind that peer group includes a lot of hybrid healthcare funds that count traditional pharmaceutical companies and even some healthcare services companies among their portfolio holdings, skewing their returns upward over the last year. So viewed in that context, the Fidelity fund's performance is even better.

Over the last quarter, the returns are better. The Fidelity Select Biotechnology Fund was up 3.18 percent, outperforming its peer group, whose average return during the same three-month period was -1.63 percent. Over the past twelve months, however, the fund's showing isn't as auspicious. Returns for the peer group were down 23.64 percent, while the fund was down 36.82 percent. Still, many of those peer funds bought into the rising stocks of big drug companies, while Fidelity refrained from violating its biotech-only mandate.

The fund currently holds shares of about fifty-five companies in its portfolio. The ten largest equity positions constitute 71.4 percent of its investments, which is one of the highest concentrations among the biotech fund group. The average position constitutes only 1.8 percent of the portfolio, meaning cash in the next forty-five holdings are spread pretty thinly.

The most heavily weighed among Fidelity's positions are the top five holdings, which average 11.2 percent of the portfolio. They are: Gilead Sciences, Biogen, Amgen, IDEC Pharmaceuticals, and MedImmune (MEDI), in that order. During the first half of 2002, the Fidelity fund's biggest purchases were in Applera Corporation, Gilead Sciences, MedImmune, Affymetrix (AFFX), and IDEC Pharmaceuticals. The five largest reported sales over that period were in Amgen, Biogen, Cephalon (CEPH), Genzyme (GENZ), and OSI Pharmaceuticals (OSIP). As of September 30, the fund held about 19 percent of its assets in cash.

We mostly like the Fidelity fund because of its basket of holdings. First, it's fairly true to the biotechnology label with the exception of a few holdings that we consider outside the box, such as Shire (SHPGY), a company we regard as a specialty pharmaceutical. That's cheating!

But Fidelity counts among its holdings some significant positions in stocks we have identified in the past, including Amgen, Gilead, and Vertex. Many of the other holdings are also attractive: Trimeris (**TRMS**), Neurocrine Biosciences, IDEC Pharmaceuticals, and Cephalon are all solid technology plays. It's true that Fidelity has a bias toward many of the big-cap stocks that appear in the biotech indexes, and given the fund's size, this orientation seems inevitable. But you could do worse. And with the Fidelity fund, you're getting the most experienced team of analysts, as well as a history of good management.

One caveat: the Fidelity biotech fund has been a sort of proving ground for Fidelity's techie, growth-oriented managers—the top biotech manager will frequently move on to manage other larger, more prestigious growth funds inside the Fidelity empire. So there's a turnover in managers. But Fidelity still has one of the best farm systems to recruit from.

All around, Fidelity Select is a solid choice. The biggest risk, as we see it, is the fund's manager. Andraz Razen is new to the position—he worked as an analyst before taking the top job earlier this year. Morningstar advises that prospective investors wait for Razen to steer the fund back into the black before investing. You might want to let him learn with someone else's money. Better times will emerge, and the real test will be to see if Razen has selected the right basket of companies to lead the market out of its doldrums.

Like Fidelity, the Franklin Biotechnology Discovery Fund (FBDIX) sticks with biotech companies through thick and thin. And like the Fidelity fund, there's been a recent turnover in management. The Franklin fund has been the best performer in the biotech space over the last five years, but one of the guys principally responsible for those gains—Franklin fund's co-manager, Kurt Von Emster—left the fund near the end of 2000 in order to run a hedge fund. We hear the hedge fund is doing better than the biotech fund he left behind. Unfortunately, the mutual fund doesn't go short. The Franklin fund's new lead manager Evan McCulloch is considered solid in biotechnology circles, but we don't know too much about him.

About half of the Franklin fund is invested in younger drug-development companies, and as a result, it has higher risk than funds that invest predominantly in larger-cap biotech names and companies included in all of the major biotech indexes. But this also means that the fund has higher upside if the manager makes smart picks and finds a few diamonds among the unloved many. Remember, investing in biotech is a stock picker's game. And the Franklin team spends time trying to pick better stocks.

Franklin Biotechnology Discovery Fund

Telephone:	800-342-5236
Net Assets:	471.60 (\$mil)
Investment Minimum (initial/repeat):	\$1,000/\$50
IRA Minimum (initial/repeat):	\$250/\$50
Purchase fee:	5.75%
Redemption:	0.00%

RETURNS AS OF 11/30/2002

1 Year:	-36.40%
5 Years:	8.08%
10 Years:	NA

Franklin Biotechnology Discovery Fund Top Holdings

COMPANY NAME	# OF SHARES	CHANGE FROM PRIOR REPORT	% TOTAL
Amgen	1,339,300	0	13.37
IDEC	686,100	168,400	6.82
MedImmune	1,350,117	0	6.76
Gilead	695,000	110,400	5.58
InterMune	576,200	0	4.53
Genzyme	896,300	184,800	4.42
Invitrogen	406,500	0	3.32
Serono SA	27,530	0	3.15
Genentech	402,000	-248,000	3.14
Millennium	1,400,129	226,400	3.12
Biogen	392,000	288,100	2.75
Neurocrine	268,300	63,000	2.63
OSI Pharmaceuticals	640,300	180,400	2.60
Trimeris	228,400	0	2.44
NPS Pharmaceuticals	489,400	32,500	2.41
King Pharmaceuticals	520,800	260,000	2.27
Chiron	244,200	0	2.04
Allergan	154,300	154,300	2.01
Kosan	1,206,191	38,900	1.89
Genta	1,158,500	0	1.78
Cerus Corporation	426,600	100,000	1.70
Abgenix	1,032,500	643,000	1.60
Vertex	339,200	0	1.50
Telik	446,200	0	1.32
ICN Pharmaceuticals	597,000	0	1.30

Franklin Biotechnology Discovery Fund Returns

YEAR	RETURN	RANKING	PEER GROUP	NAV
1998	10.73%	32 of 44	18.55%	\$26.27
1999	97.91	1 of 51	15.60%	\$49.93
2000	46.58	40 of 70	56.64%	\$73.00
2001	-20.48	86 of 99	-11.58%	\$58.05

As an internal policy, the fund will not go much beyond 20 percent cash. It has the ability to go short and has done so periodically, but only on a very small scale. The fund's new lead manager, Evan McCulloch, has now been with the fund since 1997. As we mentioned, his comanager left after helping guide the fund to a 98 percent gain in 1999 and a 47 percent rise in 2000. So far this year it's down 39 percent, in line with the Amex biotech

Pimco RCM Biotechnology D Fund

Telephone:	800-227-7337
Net Assets:	258.00 (\$mil)
Investment Minimum (initial/repeat):	\$2,500/\$100
IRA Minimum (initial/repeat):	\$1,000/\$100
Purchase fee:	0.00%
Redemption:	0.00%
Returns as of 11/30/2002	
1 Year:	-37.83%
5 Years:	NA
10 Years:	NA

Pimco RCM Biotechnology D Fund Top Holdings

COMPANY NAME	# OF SHARES	CHANGE FROM PRIOR REPORT	% TOTAL
Amgen	693,866	-94,720	11.10
IDEC	683,200	196,600	10.88
Gilead	575,100	253,100	7.40
MedImmune	796,800	21,800	6.41
Cephalon	305,500	-28,000	4.78
InterMune	323,400	16,800	4.07
Genentech	297,888	-193,600	3.73
Amylin	575,000	575,000	3.67
Anthem	131,000	-104,400	3.27
Neurocrine	197,100	94,500	3.10
Serono SA	13,425	2,000	2.46
Charles River Labs	158,810	-263,550	2.39
Biomet	223,000	99,900	2.28
Affymetrix	284,500	284,500	2.27
Medtronic	139,100	139,100	2.25
Laboratory Corp	160,200	-64,200	2.08
Biogen	178,600	13,200	2.01
Trimeris	110,400	110,400	1.89
OSI Pharmaceuticals	277,000	-37,500	1.80
Adolor Corp	315,600	0	1.70
Millennium	465,700	-9,600	1.66
CV Therapeutics	180,000	70,600	1.44
Esperion Therapeutics	575,000	-425,000	1.26
Protein Design Labs	393,900	-105,300	1.25
WellPoint Health	43,600	43,600	1.23

Pimco RCM Biotechnology D Fund Returns

Year	Return	Ranking	Peer Group	NAV
2001	-24.68%	93 of 99	-11.58%	\$27.40

index. If you're inclined to credit the co-manager with the gains, and McCullough with the losses, keep in mind that the fund's gyrations roughly reflect the last boombust biotech cycle.

To be sure, there has been a significant gap between the return of the Franklin Biotechnology Discovery Series Fund and its peer group to the market in the last twelve months ending from December. The fund's peer group and the market were down 23.64 percent and 15.11 percent, respectively, while the Franklin fund was down 36.79 percent. But the peer group, remember, holds other names. Compared to the biotech-only funds, Franklin is among the better performers.

The Franklin fund has about forty-five holdings in its portfolio. This concentration makes it riskier by objective measures than many of its peers, but on the other hand, focus also allows the manager to realize greater returns from his smart picks. The fund's 6.23 percent average annual return over the last five years is ahead of the peer group, which posted a return of 5.40 percent. The fund's -2.56 percent return in the most recent three-month period compared to a market return of -2.39 percent, although it was slightly below the peer group average of -1.64 percent.

Currently, about 55 percent of the fund's holdings are concentrated in its ten largest equity positions. The average position constitutes about 2.2 percent of the portfolio, a higher concentration than the Fidelity Select fund. However, the concentration at the top is less, with the five largest holdings representing 37 percent of the fund, an average of 7.4 percent each.

The five largest sales that were reported for the fund as of October were in Waters Corporation (WAT), Genentech, Enzon (ENZN), Xoma (XOMA), and Exelixis (EXEL). Exelixis was one of the fund's best performers over the last quarter, rising on news that the company signed a six-year agreement with Glaxo (GSK) for the development of small molecule drugs in the areas of vascular disorders, inflammation, and cancer. The manager seems to have used the deal's announcement as an opportunity to take some profits on the stock. The five largest purchases were in Biogen, Allergan (AGN), IDEC, Scios (SCIO), and Kind Pharmaceuticals.

Compared to its peers, the Franklin fund holds fewer of the stocks we like and has been a solid performer over the last five years. But many of those gains were made under its old stewardship. All in all, it's still a solid choice, but we'd tread carefully. Give the new manager a chance to show some gains, especially the fund's stock mix isn't how we'd prefer to structure a biotech portfolio.

The Pimco RCM Biotechnology D Fund (DRBNX)

has fallen 37 percent this year, but shot up at 401K—goosing 111 percent in 1999 and 82 percent in 2000. But those big gains were under old management, and so far the new manager has produced nothing but losses. In fairness, Michael Dauchot, who became the Pimco fund's lead manager in 2001, has faced a dismal market, and his fund has outperformed many of its pure-play peers. But new management is new management—you can never be certain what you're getting. Still, Dauchot has some stripes on his sleeves. He was a co-manager during the go-go period for this fund, and he learned at the knee of one of the industry's best biotech stock pickers. He has also co-helmed its biotech-rich sibling fund, Pimco RCM Global Health Care (which rose 73 percent in 2000), since 1999.

Prior to February 5, 2002, the fund was named Dresdner RCM Biotechnology Fund, when it was acquired by Pimco. The fund's old manager was one of the stars of the sector, and the old Dresdner fund racked up impressive returns. Its three-year annualized returns are 47.8 percent including 111 percent for 1999 and 81.9 percent in 2000.

That's history. We'll focus on the present. The new Pimco fund is load-free. Its performance over the last two years is much lower than the stock market as a whole (represented by the -20.15 percent return of the S&P 500) and is also much lower than the -19.12 percent return of the peer group of healthcare funds to which biotech funds are compared. But we're reminded again that the peer group includes a lot of hybrid funds that hold pharmaceutical companies which have managed much better over the last year. Compared to the pure-play biotech funds, the Pimco offering has fared better.

Over the last twelve months, the fund is down 34.03 percent compared to a peer group that was down 23.64 percent and a market that was down 15.11 percent, as represented by the S&P 500. In the last three months, the fund returned 2.37 percent to investors versus a market return of -2.39 percent, so at least in the short-term it's outperforming the market as well as its own peer group, which was down 1.64 percent.

The fund holds forty-four companies in its portfolio, mostly biotech outfits, although its manager tends to stray a bit into clinical diagnostics, small pharmaceutical companies, and generics. It even holds a medical device company: Medtronic (MOT). Historically, the latter appears to make up no more than about 10 percent of the fund's holdings at any time. The ten largest equity holdings represent 58 percent of the fund's investments. The average position constitutes 2.3 percent of the portfolio. The top five holdings are the most heavily weighed, each representing an average of 8.1 percent of the portfolio. The five biggest sales for the fund for the first half of 2002 were Charles River Labs (CRL), Anthem (ATH), Genentech, NeoPharm (NEOL), and Amgen. The five largest purchases over that time were in Amylin Pharmaceuticals (AMLN), Gilead, IDEC Pharmaceuticals, Affymetrix, and Medtronic.

Once again, this fund's mix of stocks isn't what we'd choose, so this fund wouldn't be our first choice. Also, while its manager has some experience—in a sector where long-term know-how is scarce—he could still use some more time to prove that he can post some gains to go with all those losses.

The John Hancock Biotechnology Fund (JBTAX) was

John Hancock Biotechnology Fund

Telephone:	800-257-3336
Net Assets:	1.0 (\$mil)
Investment Minimum (initial/repeat):	\$1,000/\$0
IRA Minimum (initial/repeat):	\$250/\$0
Purchase fee:	1.0%
Redemption:	1.0%
Returns as of 11/30/2002	
1 Year:	-46.15%
5 Years:	NA
10 Years:	NA

John Hancock Biotechnology Fund Top Holdings

COMPANY NAME	# OF SHARES	CHANGE FROM PRIOR REPORT	% TOTAL
Gilead Sciences	20,000	-3,000	7.15
Amgen	16,000	-6,000	7.11
IDEC Pharmaceuticals	16,000	-1,000	7.08
Genentech	16,000	1,000	5.57
Cephalon	12,500	0	5.44
InterMune	15,000	-1,000	5.25
Charles River Labs	11,500	0	4.81
Neurocrine Biosciences	11,000	0	4.81
Scios Incorporated	17,000	3,500	4.61
Affymetrix	18,000	4,000	3.99
Trimeris	8,000	2,500	3.81
Invitrogen	9,000	1,000	3.27
Genzyme	13,000	0	2.86
NPS Pharmaceuticals	13,000	13,000	2.85
Biogen	9,000	3,000	2.81
Vertex Pharmaceuticals	14,000	1,500	2.76
Sangstat Medical	12,000	0	2.67
Millennium	26,000	4,000	2.58
Human Genome Sciences	20,000	5,000	2.57
Myriad Genetics	13,500	3,000	2.28
Ligand Pharmaceuticals	31,000	18,000	2.25
Serono SA	17,000	17,000	2.19
Chiron Corp	5,000	2,000	1.86
SICOR Inc	10,000	-6,000	1.62
Albany Molecular	6,500	6,500	1.18

down significantly this past year, which is a particularly stunning feat considering that the fund is new and invested most of its money in the course of the past twelve months. It bought into one of the worst biotech markets on record and still managed to ride its holdings down even lower.

So why include it here? It is one of the few pure-play biotech funds in the marketplace that has a solid management team behind it. While we would recommend that investors give this fund some time to mature—and the managers more time to demonstrate consistent returns before investing, we wanted to break it out here to introduce it as one of the funds worth following.

The fund's manager Linda Miller was a former biotechnology research analyst with a good track record. She was selected to *Institutional Investor*'s "All-American Research Team" in the field of biotechnology for seven consecutive years between 1986 and 1992 and was recognized in *The Wall Street Journal's* "All-Star Analyst" survey in 1993. Miller also manages the \$449-million John Hancock Health Sciences Fund, which invests a portion of its assets in biotechnology.

Over the last year, the fund was down 41.84 percent and down 1.08 percent over the last three months. This puts it in line with the other pure-play biotechnology funds, all of which suffered this past year. About 56 percent of the fund's assets are in its ten largest positions, with the average position overall constituting 3.1 percent of the portfolio. The five most significant sales for the fund as of this past September were in Amgen, Gilead, SICOR (SCRI), IDEC, and InterMune (ITMN). The five biggest purchases over that period were in NPS Pharmaceuticals (NPSP), Serono SA (SRA), Ligand Pharmaceuticals, Trimeris, and Albany Molecular Research (AMRI). John Hancock holds some of the stock we like, but overall, it's not how we'd put together a biotech portfolio. The fund will close to new investors when assets reach \$250 million.

> Scott Gottlieb, M.D. January 24, 2003

BIUIELH						
COMPANY	TECHNOLOGY LEADERSHIP	REFERENCE <u>DATE</u>	REFERENCE <u>PRICE</u>	1/24/03 <u>PRICE</u>	52-WEEK <u>RANGE</u>	MARKET <u>CAP</u>
ABGENIX (ABGX)	ANTIBODY THERAPEUTICS	9/30/02	6.61	6.05	5.16 - 26.86	529.8M
CELL GENESYS (CEGE)	CANCER THERAPEUTICS	6/10/02	13.24	10.07	9.32 - 18.75	362.7M
COGENT NEUROSCIENCES (NONE*)	NEUROGENOMICS	5/2/02				
CURAGEN (CRGN)	CELLULAR SIGNALLING	3/13/02	17.67	4.47	3.40 - 18.55	220.4M
GILEAD SCIENCES (GILD)	RATIONAL DRUG DESIGN	12/05/01	33.88**	34.94	26.08 - 40.00	6.9B
HUMAN GENOME SCIENCES (HGSI)	CELLULAR SIGNALING	10/26/01	43.97	7.56	7.81 - 30.21	973.4M
IMPATH (IMPH)	GENOMIC DIAGNOSTICS	12/20/02	19.48	20.84	9.98 - 44.40	340.3M
ISIS PHARMACEUTICALS INC. (ISIS)	ANTISENSE THERAPEUTICS	7/9/02	7.30	6.63	6.00 - 18.99	365.6M
MDS PROTEOMICS (NONE*)	PROTEOMICS	2/05/02				
MILLENNIUM PHARMACEUTICALS (MLNM)	TARGETED DRUGS	11/29/02	10.01	8.24	7.13 - 25.55	2.4B
NANOGEN (NGEN)	BIOCHIPS	10/2/01	4.95	1.52	1.22 - 5.60	33.4M
OSI PHARMACEUTICALS (OSIP)	CANCER THERAPEUTICS	8/27/02	16.16	15.55	11.50 - 47.50	566.3M
QUOREX (NONE*)	RATIONAL DRUG DESIGN	12/05/01				
SEQUENOM (SQNM)	PHARMACOGENOMICS	1/09/02	9.00	1.72	1.25 - 7.66	67.8M
TRIAD THERAPEUTICS (NONE*)	RATIONAL DRUG DESIGN	4/9/02				
VERSICOR (VERS)	ANTI-INFECTIVES	10/29/02	10.00	12.25	7.65 - 21.45	323.1M
VERTEX (VRTX)	RATIONAL DRUG DESIGN	9/17/01	28.60	14.95	12.67 - 32.45	1.1B

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* Pre-IPO startup companies.

** Split-adjusted price.

NOTE: This list of Gilder Biotech Report companies is not a model portfolio. It is a list of technologies in the biotech paradigm and of companies that lead in their applications. Companies appear on this list only for their technology leadership, without consideration of their current share price or the appropriate timing of an investment decision. The presence of a company on the list is not a recommendation to buy shares at the current price. Reference Price is the company's closing share price on the Reference Date, the day the company was added to the table, typically the last trading day of the month prior to publication. The author and other Gilder Publishing, LLC staff may hold positions in some or all of the companies listed or discussed in the issue.

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