BlackRock Health Sciences Trust Form N-Q September 28, 2009

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-21702

Name of Fund: BlackRock Health Sciences Trust (BME)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Anne F. Ackerley, Chief Executive Officer, BlackRock Health Sciences Trust, 40 East 52nd Street, New York, NY 10022.

Registrant s telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 10/31/2009

Date of reporting period: 07/31/2009

Item 1 Schedule of Investments

Schedule of Investments July 31, 2009 (Unaudited)

BlackRock Health Sciences Trust (BME) (Percentages shown are based on Net Assets)

Common Stocks	Shares	Value
Biotechnology 13.7%		
3SBio, Inc ADR (a)	31,200	\$ 302,952
Alexion Pharmaceuticals, Inc. (a)	74,900	3,299,345
Amgen, Inc. (a)	93,800	5,844,678
Amylin Pharmaceuticals, Inc. (a)	133,300	1,960,843
ARYx Therapeutics, Inc. (a)	20,300	69,223
Celera Corp. (a)	193,300	1,159,800
Dendreon Corp. (a)	157,200	3,805,812
Immunogen, Inc. (a)	13,200	114,708
Incyte Corp. Ltd. (a)	35,700	185,640
Life Technologies Corp. (a)	54,900	2,499,597
Millipore Corp. (a)	38,400	2,672,640
Nanosphere, Inc. (a)	14,000	98,840
Vertex Pharmaceuticals, Inc. (a)	105,590	3,802,296
		25,816,374
Commercial Services 1.2%		
McKesson Corp.	42,710	2,184,617
Electronics 4.1%		
Mettler-Toledo International, Inc. (a)	11,600	975,096
PerkinElmer, Inc.	205,600	3,624,728
Thermo Fisher Scientific, Inc. (a)	68,500	3,101,680
		7,701,504
Healthcare Products 29.6%		
Alcon, Inc.	55,800	7,120,080
Beckman Coulter, Inc.	16,180	1,019,178
Boston Scientific Corp. (a)	332,200	3,567,828
Cie Generale d Optique Essilor International SA	56,800	3,148,284
Cooper Cos., Inc. (The)	57,200	1,569,568
Coviden Plc	101,660	3,843,765
CR Bard, Inc.	18,000	1,324,260
DENTSPLY International, Inc.	63,200	2,107,720
DiaSorin SpA	45,300	1,265,275
Elekta AB	12,900	202,780
Henry Schein, Inc. (a)	53,000	2,723,140
Hill-Rom Holdings, Inc.	92,400	1,583,736
Johnson & Johnson	138,970	8,461,883
Medtronic, Inc.	82,090	2,907,628
Mindray Medical International Ltd ADR	40,400	1,200,688
Patterson Cos., Inc. (a)	13,700	347,432
QIAGEN NV (a)	155,500	2,948,280
ResMed, Inc. (a)	11,900 185,400	487,900
Smith & Nephew Plc Sonova Holding AG	185,400 27,000	1,468,908
Tecan Group AG	31,100	2,376,565 1,336,996
Varian Medical Systems, Inc. (a)	21,300	751,251
varian ividalidystems, inc. (a)	21,300	751,251

Wright Medical Group, Inc. (a)	57,300	797,61
Zimmer Holdings, Inc. (a)	71,800	3,345,88
		55,906,64
lealthcare Services 6.6%		
Aetna, Inc.	53,000	1,429,41
Coventry Health Care, Inc. (a)	88,200	2,028,60
DaVita, Inc. (a)	37,580	1,867,72
Fresenius Medical Care AG & Co. KGaA	21,400	982,86
UnitedHealth Group, Inc.	38,000	1,066,28
WellPoint, Inc. (a)	96,200 	5,063,96
		12,438,85
Pharmaceuticals 32.1%		
Abbott Laboratories	88,940	4,001,41
Allergan, Inc.	50,900	2,719,58
Auxilium Pharmaceuticals, Inc. (a)	25,200	779,43
BioForm Medical, Inc. (a)	12,800	32,12
BioMarin Pharmaceutical, Inc. (a)	90,028	1,477,35
Bristol-Myers Squibb Co.	231,700	5,037,15
Cypress Bioscience, Inc. (a)	4,200	37,12
Express Scripts, Inc. (a)	37,880	2,653,11
Gilead Sciences, Inc. (a)	34,760	1,700,80
GlaxoSmithKline Plc	209,700	4,017,76
Human Genome Sciences, Inc. (a)	33,600	480,48
MAP Pharmaceuticals, Inc. (a)	15,700	159,98
Common Stocks	Shares	Value
Pharmaceuticals (concluded)		
Medco Health Solutions, Inc. (a)	90,210 \$	4,768,50
Medivation, Inc. (a)	30,600	757,35
Merck & Co., Inc.	124,200	3,727,24
Novartis AG	70,400	3,216,54
Novartis AG - ADR	22,390	1,021,43
Novo Nordisk A/S	18,600	1,088,37
Pfizer, Inc.	437,800	6,974,15
Pharmasset, Inc. (a)	15,700	241,62
Roche Holding AG	35,750	5,635,87
Shire Plc - ADR	21,800	976,85
Teva Pharmaceutical Industries Ltd ADR	38,650	2,061,59
VCA Antech, Inc. (a) Wyeth	79,200 105,132	2,025,93 4,893,89
	-	60,485,73
- 11 a a a a		•
Retail 3.8%	215,200	7,204,89
	-,	
CVS Caremark Corp.		
CVS Caremark Corp. Software 2.1%	102 700	1.769.52
CVS Caremark Corp. Software 2.1% Allscripts-Misys Healthcare Solutions, Inc. Cerner Corp. (a)	102,700 35,000	1,769,52 2,277,80
CVS Caremark Corp. Software 2.1% Allscripts-Misys Healthcare Solutions, Inc.	·	
CVS Caremark Corp. Software 2.1% Allscripts-Misys Healthcare Solutions, Inc.	·	2,277,80

Short-Term Securities

BlackRock Liquidity Funds, TempFund, 0.29% (b)(c)	5,602,199	5,602,199
Total Short-Term Securities (Cost \$5.602.199) 3.0%		5.602.199

Options Purchased	Contracts	
Exchange-Traded Call Option Purchased 0.0% Gen-Probe, Inc., Strike Price \$45, Expires 8/24/09	150	1,399
Total Options Purchased (Cost \$1,549) 0.0%		1,399
Total Investments Before Outstanding Options Written (Cost \$163,213,306*) 96.2%		181,389,535

Options Written

Exchange-Traded Call Options Written (1.0)%		
3SBio, Inc ADR, Strike Price \$10, Expires		
9/21/09	(80)	(5,400)
Abbott Laboratories, Strike Price \$49,		
Expires 11/23/09	(50)	(4,750)
Abbott Laboratories, Strike Price \$50,	(400)	(500)
Expires 8/24/09	(100)	(500)
Aetna, Inc., Strike Price \$30, Expires 9/21/09	(80)	(6,600)
Alcon, Inc., Strike Price \$120, Expires	(60)	(0,000)
11/23/09	(100)	(127,500)
Alcon, Inc., Strike Price \$130, Expires	(100)	(,,,,,,,
11/23/09	(100)	(69,500)
Alexion Pharmaceuticals, Inc., Strike Price		
\$40, Expires 11/23/09	(135)	(87,750)
Alexion Pharmaceuticals, Inc., Strike Price		
\$40, Expires 8/24/09	(50)	(22,000)
Alexion Pharmaceuticals, Inc., Strike Price	(400)	(00.500)
\$45, Expires 11/23/09	(100)	(36,500)
Allscripts-Misys Healthcare Solutions, Inc.,	(160)	(25.200)
Strike Price \$15, Expires 8/24/09 Amgen, Inc., Strike Price \$57.50, Expires	(160)	(35,200)
8/24/09	(70)	(40,250)
Auxilium Pharmaceuticals, Inc., Strike	(70)	(10,200)
Price \$30, Expires 8/24/09	(60)	(12,300)
Beckman Coulter, Inc., Strike Price \$60,	,	, ,
Expires 8/24/09	(80)	(28,800)

JULY 31, 2009

Schedule of Investments (continued)

BlackRock Health Sciences Trust (BME) (Percentages shown are based on Net Assets)

	Options Written	Contracts	Value
Exchange-Traded Call Options Written	(continued)		
Beckman Coulter, Inc., Strike Price \$60, Expires 9/21/09		(25)	\$ (10,875)
BioMarin Pharmaceuticals, Inc., Strike Price \$17.50, Expires 8/24/09		(40)	(1,000)
BioMarin Pharmaceuticals, Inc., Strike Price \$17.50, Expires 9/21/09		(90)	(5,400)
Boston Scientific Corp., Strike Price \$10, Expires 8/24/09		(930)	(83,700)
Boston Scientific Corp., Strike Price \$11, Expires 11/23/09		(400)	(39,000)
Bristol-Myers Squibb Co., Strike Price \$21 Expires 12/21/09		(100)	(18,400)
Bristol-Myers Squibb Co., Strike Price \$21 Expires 8/24/09		(240)	(23,880)
Cerner Corp., Strike Price \$75, Expires 12/21/09		(120)	(30,900)
Cooper Cos., Inc. (The), Strike Price \$30, Expires 11/23/09		(70)	(10,325)
Cooper Cos., Inc. (The), Strike Price \$30, Expires 8/24/09		(120)	(2,100)
Coventry Health Care, Inc., Strike Price \$20, Expires 8/24/09		(240)	(75,600)
CVS Caremark Corp., Strike Price \$32.50, Expires 8/24/09		(670)	(105,525)
DaVita, Inc., Strike Price \$50, Expires 8/24/09		(115)	(21,275)
DaVita, Inc., Strike Price \$55, Expires 8/24/09		(8)	(220)
Dendreon Corp., Strike Price \$30, Expires 11/23/09		(100)	(17,050)
Dendreon Corp., Strike Price \$30, Expires 8/24/09		(150)	(2,850)
Dendreon Corp., Strike Price \$35, Expires 11/23/09		(100)	(8,900)
Express Scripts, Inc., Strike Price \$70, Expires 8/24/09		(100)	(20,250)
Express Scripts, Inc., Strike Price \$75, Expires 11/23/09		(50)	(15,750)
Gen-Probe, Inc., Strike Price \$50, Expires 8/24/09		(150)	(1,500)
Gilead Sciences, Inc., Strike Price \$47.50, Expires 8/24/09		(90)	(19,125)
Gilead Sciences, Inc., Strike Price \$49, Expires 8/24/09		(257)	(30,840)
Henry Schein, Inc., Strike Price \$45, Expires 8/24/09		(30)	(20,100)
Henry Schein, Inc., Strike Price \$50, Expires 8/24/09		(130)	(34,125)
Johnson & Johnson, Strike Price \$60, Expires 8/24/09		(190)	(29,450)
Life Technologies Corp., Strike Price \$45, Expires 11/23/09		(95)	(35,150)
McKesson Corp., Inc., Strike Price \$47.50 Expires 8/24/09		(100)	(39,000)
		(50)	(19,000)

McKesson Corp., Inc., Strike Price \$50,		
Expires 11/23/09 McKesson Corp., Inc., Strike Price \$55,	(50)	(7.750)
Expires 11/23/09 Medco Health Solutions, Inc., Strike Price	(50)	(7,750)
\$55, Expires 9/21/09 Medtronic, Inc., Strike Price \$35, Expires	(100)	(13,000)
8/24/09 Medtronic, Inc., Strike Price \$36, Expires	(150)	(16,500)
8/24/09 Merck & Co., Inc., Strike Price \$28, Expires	(450)	(27,000)
8/24/09 Mettler-Toledo International, Inc., Strike	(350)	(80,500)
Price \$75, Expires 8/24/09 Mettler-Toledo International, Inc., Strike	(40)	(38,000)
Price \$85, Expires 8/24/09	(30)	(5,775)
Options Written	Contracts	Value
Exchange-Traded Call Options Written (concluded)		
Millipore Corp., Strike Price \$70, Expires 8/24/09	(110)	\$ (22,825)
Mindray Medical International Ltd ADR, Strike Price \$30, Expires 8/24/09	(30)	(4,575)
Novartis AG - ADR, Strike Price \$45, Expires 8/24/09	(50)	(6,375)
Patterson Cos., Inc., Strike Price \$22.50, Expires 8/24/09	(30)	(9,300)
PerkinElmer, Inc., Strike Price \$17.50, Expires 9/21/09	(450)	(43,875)
Pfizer, Inc., Strike Price \$15, Expires 9/21/09	(500)	(57,000)
QIAGEN NV, Strike Price \$17.50, Expires 8/24/09	(150)	(25,875)
OIAGEN NV, Strike Price \$20, Expires 11/23/09	(150)	(15,000)
QIAGEN NV, Strike Price \$20, Expires 8/24/09	(150)	(3,750)
ResMed, Inc., Strike Price \$40, Expires 8/24/09	` '	
Shire Plc - ADR, Strike Price \$45, Expires	(119)	(23,503)
9/21/09 Teva Pharmaceutical Industries Ltd ADR,	(2)	(410)
Strike Price \$52.50, Expires 9/21/09 UnitedHealth Group, Inc., Strike Price \$27,	(96)	(20,880)
Expires 9/21/09 VCA Antech, Inc., Strike Price \$25, Expires	(300)	(69,000)
8/24/09 Vertex Pharmaceuticals, Inc., Strike Price	(100)	(11,750)
\$35, Expires 8/24/09 WellPoint, Inc., Strike Price \$55, Expires	(250)	(50,000)
8/24/09 WellPoint, Inc., Strike Price \$60, Expires	(425)	(38,250)
12/21/09 Wright Medical Group, Inc., Strike Price	(100)	(23,000)
\$17.50, Expires 8/24/09 Wyeth, Strike Price \$45, Expires 8/24/09	(145) (200)	(1,812) (39,000)
Wyeth, Strike Price \$47.50, Expires 9/21/09	(200)	(16,000)
Zimmer Holdings, Inc., Strike Price \$50, Expires 9/21/09	(50)	(4,750)
Total Exchange-Traded Call Options Written		(1,873,795)
Exchange-Traded Put Options Written (0.1)%		<u> </u>
BioMarin Pharmaceuticals, Inc., Strike Price \$12.50, Expires 9/21/09	(90)	(1,575)
1 1100 \$12.00, Expires 5/21/00	(250)	(1,575)

Boston Scientific Corp., Strike Price \$9, Expires 11/23/09		
Covidien Plc, Strike Price \$35, Expires 8/24/09	(75)	(1,125)
CVS Caremark Corp., Strike Price \$30, Expires 8/24/09	(250)	(3,750)
Dendreon Corp., Strike Price \$19, Expires 11/23/09	(100)	(15,550)
Express Scripts, Inc., Strike Price \$60, Expires 11/23/09	(50)	(8,750)
McKesson Corp., Inc., Strike Price \$50, Expires 8/24/09	(185)	(12,950)
Merck & Co., Inc., Strike Price \$30, Expires 8/24/09	(85)	(8,075)
Pfizer, Inc., Strike Price \$14, Expires 8/24/09	(300)	(1,350)
Teva Pharmaceutical Industries Ltd ADR, Strike Price \$47.50, Expires 8/24/09	(40)	(300)
VCA Antech, Inc., Strike Price \$25, Expires 8/24/09	(35)	(1,225)
Total Exchange-Traded Put Options Written		(64,650)

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Schedule of Investments (continued)

BlackRock Health Sciences Trust (BME) (Percentages shown are based on Net Assets)

Options Written	Contracts	Value
Over-the-Counter Call Options Written (0.5)%		
Allergan, Inc., Strike Price \$50, Expires		
11/20/09, Broker UBS Securities LLC	(15,000) \$	(85,678)
Allscripts-Misys Healthcare Solutions, Inc.,		
Strike Price \$17, Expires 11/03/09,		
Broker Jefferies & Co., Inc.	(150)	(23,850)
Amgen, Inc., Strike Price \$61.95, Expires		
11/03/09, Broker Banc of America	(00,000)	(07.040)
Securities Amylin Pharmaceuticals, Inc., Strike Price	(20,000)	(97,046)
\$16, Expires 11/10/09, Broker Citigroup		
Global Markets	(20,000)	(25,583)
Bristol-Myers Squibb Co., Strike Price	(23,333)	(20,000)
\$20.50, Expires 11/03/09, Broker		
Citigroup Global Markets	(18,800)	(30,285)
Bristol-Myers Squibb Co., Strike Price \$22,	,	
Expires 11/03/09, Broker Banc of		
America Securities	(20,000)	(18,645)
Celera Corp., Strike Price \$9.33, Expires		
8/04/09, Broker Citigroup Global	(00 500)	
Markets	(38,500)	
Cie Generale d Optique Essilor International SA, Strike Price 34.83 EUR,		
Expires 8/20/09, Broker Credit Suisse		
First Boston	(13,500)	(78,630)
Coviden Plc, Strike Price \$37.50, Expires	(10,000)	(10,000)
9/14/09, Broker Barclays Capital, Inc.	(240)	(40,437)
Dendreon Corp., Strike Price \$31, Expires	` ,	,
8/21/09, Broker Barclays Capital, Inc.	(185)	(4,662)
Dentsply International, Inc., Strike Price		
\$30.50, Expires 11/13/09, Broker	(000)	(70.400)
Jefferies & Co., Inc.	(200)	(72,400)
DiaSorin SpA, Strike Price 18.34 EUR, Expires 8/12/09, Broker UBS Securities		
LLC	(10,000)	(18,230)
Fresenius Medical Care AG & Co. KGaA,	(10,000)	(10,200)
Strike Price 32.56 EUR, Expires		
8/05/09, Broker Morgan Stanley & Co.,		
Inc.	(6,000)	(2,278)
GlaxoSmithKline Plc, Strike Price 12.04		
GBP, Expires 11/04/09, Broker UBS		
Securities LLC	(53,000)	(22,015)
Hill-Rom Holdings, Inc., Strike Price		
\$17.50, Expires 11/13/09, Broker Jefferies & Co., Inc.	(175)	(21.470)
Johnson & Johnson, Strike Price \$56,	(175)	(21,470)
Expires 8/27/09, Broker UBS Securities		
LLC	(150)	(81,150)
Johnson & Johnson, Strike Price \$65,	(100)	(5.,.30)
Expires 11/03/09, Broker Banc of		
America Securities	(15,000)	(14,863)
Medco Health Solutions, Inc., Strike Price		
\$49, Expires 8/13/09, Broker UBS		
Securities LLC	(80)	(33,728)
PerkinElmer, Inc., Strike Price \$18, Expires	(450)	(0.774)
11/03/09, Broker Jefferies & Co., Inc.	(150)	(9,771)

Pfizer, Inc., Strike Price \$15.14, Expires 8/17/09, Broker Citigroup Global Markets	(87,000)		(84,000)
Roche Holding AG, Strike Price 162.75 CHF, Expires 11/04/09, Broker Citigroup			
Global Markets	(11,000)		(108,332)
Smith & Nephew Plc, Strike Price 4.60 GBP, Expires 9/16/09, Broker Credit Suisse First Boston	(25,000)		(14.006)
Sonova Holding AG, Strike Price 90.56 CHF, Expires 8/19/09, Broker BNP	(35,000)		(14,206)
Paribas	(6,400)		(26,129)
Options Written	Contracts		Value
Options written	Contracts		value
Over-the-Counter Call Options Written (concluded)			
Over-the-Counter Call Options Written (concluded) Vertex Pharmaceuticals, Inc., Strike Price			
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of	(45,000)	Φ.	(00,405)
Vertex Pharmaceuticals, Inc., Strike Price	(15,000)	\$	(33,435)
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of	(15,000)	\$	(33,435)
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities Total Over-the-Counter Call Options Written	(15,000)	\$	<u> </u>
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities	(15,000)	\$	<u> </u>
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities Total Over-the-Counter Call Options Written Total Options Written (Premiums Received \$1,994,550) (1.6)%	(15,000)	\$	(946,823)
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities Total Over-the-Counter Call Options Written Total Options Written	(15,000)	\$	(946,823)
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities Total Over-the-Counter Call Options Written Total Options Written (Premiums Received \$1,994,550) (1.6)% Total Investments Net of Outstanding Options Written	(15,000)	\$	(946,823)
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities Total Over-the-Counter Call Options Written Total Options Written (Premiums Received \$1,994,550) (1.6)% Total Investments Net of Outstanding Options Written 94.6% Other Assets in Excess of Liabilities 5.4%	(15,000)		(946,823) (2,885,268) 178,504,267 10,102,644
Vertex Pharmaceuticals, Inc., Strike Price \$38, Expires 11/03/09, Broker Banc of America Securities Total Over-the-Counter Call Options Written Total Options Written (Premiums Received \$1,994,550) (1.6)% Total Investments Net of Outstanding Options Written 94.6%	(15,000)	\$	(946,823) (2,885,268) 178,504,267

* The cost and unrealized appreciation (depreciation) of investments as of July 31, 2009, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$	164,701,835
	Φ.	01.000.000
Gross unrealized appreciation Gross unrealized depreciation	\$	21,886,639 (5,198,939)
cross unrealized depreciation		(5,196,959)
Net unrealized appreciation	\$	16,687,700

- (a) Non-income producing security.
- (b) Represents current yield as of report date.
- (c) Investments in companies considered to be an affiliate of the Trust, for purposes of Section 2(a)(3) of the Investment Company Act of 1940 were as follows:

Affiliate	Net Activity	l	Income
BlackRock Liquidity Funds, TempFund BlackRock Liquidity Series, LLC Money Market Series	5,602,199	\$	100,066
	(2,226,500)	\$	5,198

Foreign currency exchange contracts as of July 31, 2009 were as follows:

Currency		Currency		Counterparty	Settlement	Unrealized	
Purchased		Sold			Date	Appreciation	
SEK	1,466,000	USD	203,047	Citigroup Global Markets	8/04/09	\$ 117	

Effective November 1, 2008, the Trust adopted Financial Accounting Standards Board Statement of Financial Accounting Standards No. 157, Fair Value Measurements (FAS 157). FAS 157 clarifies the definition of fair value, establishes a framework for measuring fair values and requires additional disclosures about the use of fair value measurements. Various inputs are used in determining the fair value of investments, which are as follows:

Level 1 price quotations in active markets/exchanges for identical securities

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available In the circumstances, to the extent observable inputs are not available (including the Trust s own assumptions used in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Trust s policy regarding valuation of investments and other significant accounting policies, please refer to the Trust s most recent financial statements as contained in its semi-annual report.

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Schedule of Investments (continued)

BlackRock Health Sciences Trust (BME) (Percentages shown are based on Net Assets)

The following tables summarize the inputs used as of July 31, 2009 in determining the fair valuation of the Trust s investments:

		Valuation Inputs					
		Level 1		Level 2	Level 3		Total
Investments in Securities:							
Assets:							
Common Stocks:							
Biotechnology	\$	25,816,374				\$	25,816,374
Commercial	· ·					Ċ	
Services		2,184,617					2,184,617
Electronics		7,701,504					7,701,504
Healthcare		, - ,					, - ,
Products		46,107,833	\$	9,798,808			55,906,641
Healthcare		, , , , , , , , , , , , , , , , , , , ,	-	0,100,000			
Services		11,455,984		982,868			12,438,852
Pharmaceuticals		46,527,173		13,958,559			60,485,732
Retail		7,204,896		, ,			7,204,896
Software		4,047,321					4,047,321
Short-Term		.,0 ., ,0= .					.,0 ., ,0= .
Securities		5,602,199					5,602,199
	_	5,532,100					5,552,100
	_	150 017 001	•	04740005	_	•	101 000 100
Total	\$	156,647,901	\$	24,740,235		\$	181,388,136

Valuation Inputs	Other Financial Instruments ¹						
	Assets		Liabilities				
Level 1 Level 2	\$	1,399 117	\$	(1,938,445) (946,823)			
Level 3 Total	\$	1,516	\$	(2,885,268)			

Other financial instruments are options, options written and foreign currency exchange contracts. Options and options written are shown at market value and foreign currency contracts are valued at the unrealized appreciation/depreciation on the instrument.

KEY TO ABBREVIATIONS

ADR American Depositary Receipt CHF Swiss Franc

EUR Euro

GBP British Pound

SEK Swedish Krona

USD US Dollar

JULY 31, 2009

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Item 2 Controls and Procedures

- 2(a) The registrant s principal executive and principal financial officers or persons performing similar functions have concluded that the registrant s disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the 1940 Act)) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13(a)-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(b) There were no changes in the registrant s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant s last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant s internal control over financial reporting.

Item 3 Exhibits

Certifications Attached hereto

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock Health Sciences Trust

By:

/s/ Anne F. Ackerley
Anne F. Ackerley
Chief Executive Officer of
BlackRock Health Sciences Trust

Date: September 22, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By:

/s/ Anne F. Ackerley
Anne F. Ackerley
Chief Executive Officer (principal executive officer) of
BlackRock Health Sciences Trust

Date: September 22, 2009

By:

/s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock Health Sciences Trust

Date: September 22, 2009