BlackRock Health Sciences Trust Form N-Q March 25, 2014

#### **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

York, NY 10055

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

Date of fiscal year end: 10/31/2014

Date of reporting period: 01/31/2014

Item 1 Schedule of Investments

# Schedule of Investments January 31, 2014 (Unaudited)

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

Common Stocks Biotechnology 31.6%	Shares	Value
ACADIA Pharmaceuticals, Inc. (a)(b)	31,795	\$ 740,824
Acceleron Pharma, Inc. (a)	9,000	417,150
Acorda Therapeutics, Inc. (a)(b)	40,600	1,191,610
Actelion Ltd.	19,100	1,794,871
Aegerion Pharmaceuticals, Inc. (a)	18,400	1,103,632
Agios Pharmaceuticals, Inc. (a)	5,400	142,830
Alexion Pharmaceuticals, Inc. (a)(b)	44,560	7,073,009
Alkermes PLC (a)(b)	72,800	3,543,904
Amgen, Inc. (b)	46,700	5,554,965
Array BioPharma, Inc. (a)	88,100	423,761
Biogen Idec, Inc. (a)(b)	33,700	10,535,968
BioMarin Pharmaceutical, Inc. (a)(b)	51,700	3,561,096
Biota Pharmaceuticals, Inc. (a)	38,100	190,881
Bluebird Bio, Inc. (a)	9,300	206,181
Celgene Corp. (a)(b)	62,543	9,502,158
Conatus Pharmaceuticals, Inc. (a)	8,700	91,959
Dicerna Pharmaceuticals, Inc. (a)	5,100	209,712
Epizyme, Inc. (a)	11,600	352,640
Exelixis, Inc. (a)(b)	34,600	238,048
Gilead Sciences, Inc. (a)(b)	142,221	11,470,120
Incyte Corp. Ltd. (a)(b)	56,900	3,728,088
Infinity Pharmaceuticals, Inc. (a)	52,700	677,195
Intra-Cellular Therapies, Inc. (a)	27,500	533,500
Intra-Cellular Therapies, Inc.	=-,	222,244
(Acquired 10/18/13, Cost \$245,733) (c)	38,681	750,411
Isis Pharmaceuticals, Inc. (a)(b)	42,900	2,190,474
Karyopharm Therapeutics, Inc. (a)	23,957	836,339
MacroGenics, Inc. (a)	5,300	210,993
Medivation, Inc. (a)(b)	30,000	2,388,000
Momenta Pharmaceuticals, Inc. (a)(b)	27,200	486,880
Neurocrine Biosciences, Inc. (a)	60,062	1,026,460
Protalix BioTherapeutics, Inc. (a)	122,100	518,925
PTC Therapeutics, Inc. (a)	4,800	125,136
Puma Biotechnology, Inc. (a)(b)	12,800	1,513,088
Regeneron Pharmaceuticals, Inc. (a)(b)	12,658	3,652,972
Seattle Genetics, Inc. (a)(b)	74,367	3,336,104
Synageva BioPharma Corp. (a)(b)	7,903	715,854
Ultragenyx Pharmaceutical, Inc. (a)	7,600	321,100
Ultragenyx Pharmaceutical, Inc.		
(Acquired 12/18/12, Cost \$384,116) (c)	44,249	1,776,063
Verastem, Inc. (a)	21,800	273,808
Vertex Pharmaceuticals, Inc. (a)(b)	44,205	3,493,963
		96,000,672
Chemicals 0.5%		86,900,672
Sigma-Aldrich Corp.  Diversified Consumer Services 0.6%	14,400	1,338,768
Service Corp. International  Health Care Equipment & Supplies 16.4%	86,100	1,523,970
Abbott Laboratories (b)	101,500	3,720,990
Alere, Inc. (a)	35,100	1,330,290
AtriCure, Inc. (a)	25,262	517,871
Common Stocks	Shares	Value
Health Care Equipment & Supplies (concluded)		
Baxter International, Inc. (b)	18,700	\$ 1,277,210
Becton Dickinson and Co. (b)	18,800	2,032,656
Boston Scientific Corp. (a)(b)	371,500	5,026,395
CareFusion Corp. (a)(b)	54,900	2,238,273
Coloplast A/S, Class B	24,600	1,845,756
The Cooper Cos., Inc. (b)	11,000	1,367,080

Covidien PLC (b)				82,400	5,622,976
DENTSPLY International, Inc. (b)				22,400	1,033,536
Edwards Lifesciences Corp. (a)				27,300	1,777,776
Medtronic, Inc. (b)				58,800	3,325,728
PW Medtech Group Ltd. (a)			(	928,400	402,987
St. Jude Medical, Inc.			_	54,500	3,309,785
Stryker Corp. (b)				77,500	6,014,000
Varian Medical Systems, Inc. (a)				28,600	2,325,466
Zimmer Holdings, Inc. (b)				20,900	1,963,973
					45,132,748
Health Care Providers & Services 11.8%					
Aetna, Inc. (b)				31,911	2,180,479
AmerisourceBergen Corp. (b)				9,900	665,478
Cardinal Health, Inc. (b)				50,130	3,409,843
Cigna Corp. (b)				28,900	2,494,359
Envision Healthcare Holdings, Inc. (a)				38,100	1,259,586
Express Scripts Holding Co. (a)(b)				20,576	1,536,821
HCA Holdings, Inc. (a)(b)				74,800	3,760,196
Humana, Inc. (b)				8,200	797,860
McKesson Corp. (b)				20,600	3,592,846
Phoenix Healthcare Group Co. (a)				50,500	83,388
* ''					
Premier, Inc., Class A (a)				30,800	1,068,452
Team Health Holdings, Inc. (a)(b)				28,600	1,234,376
UnitedHealth Group, Inc. (b)				78,134	5,647,526
Universal Health Services, Inc., Class B (b)				39,600	3,247,992
WellPoint, Inc. (b)				16,200	1,393,200
					32,372,402
Health Care Technology 0.7%					
Cerner Corp. (a)(b)				35,000	1,991,150
Life Sciences Tools & Services 5.5%					
Agilent Technologies, Inc. (b)				56,200	3,268,030
Charles River Laboratories International, Inc. (a)				36,100	2,040,733
ICON PLC (a)				23,000	966,230
Illumina, Inc. (a)(b)				32,900	5,000,800
Life Technologies Corp. (a)				5,200	395,564
Thermo Fisher Scientific, Inc. (b)				29,700	3,419,658
Thermo Pisher Scientific, Inc. (b)				29,700	3,419,036
					15,091,015
Pharmaceuticals 32.3%					
AbbVie, Inc. (b)				162,984	8,023,702
Actavis PLC (a)(b)				15,400	2,910,292
Allergan, Inc. (b)				16,300	1,867,980
AstraZeneca PLC				21,200	1,344,380
Bayer AG				55,500	7,304,170
Bristol-Myers Squibb Co. (b)				90,400	4,517,288
* * *					•
Portfolio Abbreviations					
To simplify the listings of portfolio holdings in the Schedule of	ADR	American Depositary Receipt	GBP	British Pound	
Investments, the names and descriptions of many of the securities have	, iDI	Depositary Receipt	ODI	Difficin i Gund	
been abbreviated according to the following list:					
occii acoreviated according to the following list.	CHF	Swiss Franc	JPY	Japanese Yen	
	DKK	Danish Krone	USD	US Dollar	
	ELID	Furo			
	EUR	Euro			

JANUARY 31, 2014

1

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

Common Stocks	Shares		Value
Pharmaceuticals (concluded) Chugai Pharmaceutical Co. Ltd.	54,800	\$	1,243,126
Eli Lilly & Co. (b)	52,000	Ψ	2,808,520
Forest Laboratories, Inc. (a)(b)	39,500		2,618,850
Johnson & Johnson (b)	114,670	1	10,144,855
Mallinckrodt PLC (a)	40,200		2,324,766
Merck & Co., Inc. (b)	116,500		6,171,005
Mylan, Inc. (a)(b)	69,200		3,142,372
Novartis AG	87,800		6,939,787
Perrigo Co. PLC (b)	26,300		4,093,858
Pfizer, Inc. (b)	291,000		8,846,400
Roche Holding AG	23,800		6,529,904
Shire PLC ADR (b)	19,100		2,857,742
Valeant Pharmaceuticals International, Inc. (a)(b)	30,800		4,177,712
Zoetis, Inc.	26,900		816,684
Tetal Lang Town Language		8	88,683,393
Total Long-Term Investments			
(Cost \$200,613,218) 99.4%		27	73,034,118
Short-Term Securities	Shares	Val	ue
Short-Term Securities BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e) Total Short-Term Securities	<b>Shares</b> 3,884,083	<b>Val</b> \$ 3,8	ue 884,083
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e)		\$ 3,8	
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e)  Total Short-Term Securities		\$ 3,8	884,083
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e)  Total Short-Term Securities  (Cost \$3,884,083) 1.4%		\$ 3,8	884,083 884,083
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e) Total Short-Term Securities  (Cost \$3,884,083) 1.4%  Total Investments Before Options Written  (Cost \$204,497,301*) 100.8%  Options Written		\$ 3,4 3,5 276,91	884,083 884,083 8,201
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e) Total Short-Term Securities  (Cost \$3,884,083) 1.4%  Total Investments Before Options Written  (Cost \$204,497,301*) 100.8%  Options Written (Premiums Received \$2,311,415) (1.1)%		\$ 3,4 3,4 276,91	884,083 884,083 8,201 954,971)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e) Total Short-Term Securities  (Cost \$3,884,083) 1.4%  Total Investments Before Options Written  (Cost \$204,497,301*) 100.8%  Options Written (Premiums Received \$2,311,415) (1.1)% Total Investments Net of Options Written 99.7%		\$ 3,4 276,91 (2,9 273,9	884,083 884,083 8,201 954,971) 963,230
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e) Total Short-Term Securities  (Cost \$3,884,083) 1.4%  Total Investments Before Options Written  (Cost \$204,497,301*) 100.8%  Options Written (Premiums Received \$2,311,415) (1.1)%		\$ 3,4 276,91 (2,9 273,9	884,083 884,083 8,201 954,971)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.03% (d)(e) Total Short-Term Securities  (Cost \$3,884,083) 1.4%  Total Investments Before Options Written  (Cost \$204,497,301*) 100.8%  Options Written (Premiums Received \$2,311,415) (1.1)% Total Investments Net of Options Written 99.7%		\$ 3,4 276,91 (2,9 273,9	884,083 884,083 8,201 954,971) 963,230

#### Notes to Schedule of Investments

<sup>\*</sup> As of January 31, 2014, gross unrealized appreciation and gross unrealized depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 207,049,081
Gross unrealized appreciation Gross unrealized depreciation	\$ 71,232,048 (1,362,928)
Net unrealized appreciation	\$ 69.869,120

- (a) Non-income producing security.
- (b) All or a portion of security has been pledged/segregated as collateral in connection with outstanding options written.
- (c) Restricted security as to resale. As of January 31, 2014 the Trust held 0.9% of its net assets, with current market value of \$2,526,474 and the original cost of \$629,849, in these securities.
- (d) Represents the current yield as of report date.
- (e) Investments in issuers considered to be an affiliate of the Trust during the period ended January 31, 2014, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

	Shares Held at	Net	Shares Held at	
Affiliate	October 31, 2013	Activity	January 31, 2014	Income
BlackRock Liquidity Funds, TempFund, Institutional Class	1,144,662	2,739,421	3,884,083	\$ 146

For Trust compliance purposes, the Trust sindustry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or ratings group indexes, and/or as defined by the investment advisor. These definitions may not apply for purposes of this report, which may combine industry sub-classifications for reporting ease.

Exchange-traded options written as of January 31, 2014 were as follows:

		Stı	ike	Expiration		Market
	Put/					
Description	Call	Pr	ice	Date	Contracts	Value
Aetna, Inc.	Call	USD	71.00	2/07/14	112	\$ (4,368)
Amgen, Inc.	Call	USD	117.00	2/07/14	200	(58,100)
Gilead Sciences, Inc.	Call	USD	84.00	2/07/14	85	(9,732)
Medtronic, Inc.	Call	USD	60.00	2/07/14	250	(500)
Pfizer, Inc.	Call	USD	31.50	2/14/14	149	(1,192)
AmerisourceBergen Corp.	Call	USD	72.60	2/22/14	69	(304)

### BlackRock Health Sciences Trust (BME)

Exchange-traded options written as of January 31, 2014 were as follows: (continued)

		Strike		Strike Expiration				Market								
	Put/															
Description	Call									Price				Date	Contracts	Value
Abbott Laboratories	Call	USD	39.00	2/24/14	17	\$ (102)										
Abbott Laboratories	Call	USD	40.00	2/24/14	338	(507)										
AbbVie, Inc.	Call	USD	52.50	2/24/14	120	(3,300)										
AbbVie, Inc.	Call	USD	55.00	2/24/14	570	(4,275)										
Actoria Therapeutics, Inc.	Call Call	USD USD	30.00 170.00	2/24/14 2/24/14	142 56	(14,910)										
Actavis PLC Agilent Technologies, Inc.	Call	USD	62.50	2/24/14	196	(114,520) (9,016)										
Alexion Pharmaceuticals, Inc.	Call	USD	140.00	2/24/14	138	(270,480)										
Alkermes PLC	Call	USD	49.00	2/24/14	254	(57,785)										
Biogen Idec, Inc.	Call	USD	295.00	2/24/14	107	(228,445)										
BioMarin Pharmaceutical, Inc.	Call	USD	75.00	2/24/14	184	(16,560)										
Boston Scientific Corp.	Call	USD	13.00	2/24/14	44	(3,432)										
Bristol-Myers Squibb Co.	Call	USD	55.00	2/24/14	344	(3,440)										
Cardinal Health, Inc.	Call	USD	70.00	2/24/14	23	(1,208)										
CareFusion Corp.	Call	USD	41.00	2/24/14	200	(31,500)										
Celgene Corp.	Call	USD	170.00	2/24/14	218	(8,611)										
Cerner Corp.	Call	USD	55.00	2/24/14	65	(20,150)										
Cerner Corp.	Call	USD	60.00	2/24/14	65	(5,525)										
Cigna Corp.	Call	USD	90.00	2/24/14	101	(8,232)										
The Cooper Cos., Inc.	Call	USD	125.00	2/24/14	95	(20,188)										
Covidien PLC	Call	USD	70.00	2/24/14	130	(6,175)										
DENTSPLY International, Inc.	Call	USD	50.00	2/24/14	78	(1,170)										
Exelixis, Inc.	Call	USD	9.00	2/24/14	220	(3,300)										
Express Scripts Holding Co.	Call	USD	70.00	2/24/14	74	(39,590)										
Gilead Sciences, Inc.	Call	USD	75.00	2/24/14	414	(284,621)										
HCA Holdings, Inc.	Call	USD	50.00	2/24/14	260	(45,500)										
Humana, Inc.	Call	USD	105.00	2/24/14	50	(3,375)										
Illumina, Inc.	Call	USD	150.00	2/24/14	120	(81,600)										
Incyte Corp. Ltd.	Call	USD	55.00	2/24/14	60	(70,500)										
Incyte Corp. Ltd.	Call	USD	67.50	2/24/14	150	(51,750)										
Isis Pharmaceuticals, Inc.	Call	USD	50.00	2/24/14	150	(61,500)										
Johnson & Johnson	Call	USD	95.00	2/24/14	200	(1,200)										
McKesson Corp.	Call	USD	165.00	2/24/14	95	(96,425)										
Medivation, Inc.	Call	USD	75.00	2/24/14	100	(63,500)										
Medtronic, Inc.	Call	USD	57.50	2/24/14	54	(3,834)										
Merck & Co., Inc.	Call	USD	50.00	2/24/14	65	(20,962)										
Momenta Pharmaceuticals, Inc.	Call	USD	20.00	2/24/14	95	(5,463)										
Mylan, Inc.	Call	USD	47.00	2/24/14	250	(14,500)										
Perrigo Co. PLC	Call	USD	160.00	2/24/14	100	(29,000)										
Pfizer, Inc.	Call	USD	32.00	2/24/14	498	(3,486)										
Puma Biotechnology, Inc.	Call	USD	120.00	2/24/14	45	(29,700)										
Regeneron Pharmaceuticals, Inc.	Call	USD	310.00	2/24/14	45	(22,950)										
Seattle Genetics, Inc.	Call	USD	45.00	2/24/14	308	(72,380)										
Shire PLC - ADR	Call	USD	155.00	2/24/14	66	(14,850)										
Synageva BioPharma Corp.	Call	USD	70.00	2/24/14	27	(59,535)										
UnitedHealth Group, Inc.	Call	USD	75.00	2/24/14	32	(1,648)										
Valent Pharmaceuticals International, Inc.	Call	USD	120.00	2/24/14	44	(75,020)										
Valeant Pharmaceuticals International, Inc.	Call	USD	145.00	2/24/14	63	(12,285)										
Zimmer Holdings, Inc. Baxter International, Inc.	Call	USD	100.00	2/24/14	25 65	(438)										
Team Health Holdings, Inc.	Call Call	USD USD	70.00 48.00	2/28/14 2/28/14	65 100	(3,250) (912)										
ream freath from 185, me.	Can	USD	40.00	4/40/14	100	(912)										

#### **BlackRock Health Sciences Trust (BME)**

Exchange-Traded options written as of January 31, 2014 were as follows: (concluded)

		Strike		Expiration		Marke	
	Put/						
Description	Call	Pr	ice	Date	Contracts		Value
UnitedHealth Group, Inc.	Call	USD	73.50	2/28/14	241	\$	(30,125)
Vertex Pharmaceuticals, Inc.	Call	USD	82.00	2/28/14	50		(13,125)
Universal Health Services, Inc., Class B	Call	USD	86.00	3/04/14	139		(9,816)
ACADIA Pharmaceuticals, Inc.	Call	USD	29.00	3/24/14	111		(8,603)
Allergan, Inc.	Call	USD	125.00	3/24/14	57		(10,545)
Becton Dickinson and Co.	Call	USD	115.00	3/24/14	45		(2,700)
Cardinal Health, Inc.	Call	USD	70.00	3/24/14	152		(16,340)
Covidien PLC	Call	USD	70.00	3/24/14	150		(15,000)
Eli Lilly & Co.	Call	USD	55.00	3/24/14	49		(4,116)
Eli Lilly & Co.	Call	USD	57.50	3/24/14	83		(2,241)
Forest Laboratories, Inc.	Call	USD	72.50	3/24/14	138		(13,110)
Merck & Co., Inc.	Call	USD	52.50	3/24/14	300		(48,300)
Pfizer, Inc.	Call	USD	32.00	3/24/14	149		(2,980)
Stryker Corp.	Call	USD	80.00	3/24/14	270		(28,350)
Thermo Fisher Scientific, Inc.	Call	USD	120.00	3/24/14	103		(17,253)
WellPoint, Inc.	Call	USD	90.00	3/24/14	55		(7,150)
Boston Scientific Corp.	Call	USD	14.00	5/19/14	400		(31,000)
Intercept Pharmaceuticals, Inc.	Put	USD	340.00	2/24/14	20		(100,200)
Total						\$ (	(2,437,755)

Over-the-counter options written as of January 31, 2014 were as follows:

			St	trike	Expiration		
		Put/					Market
Description	Counterparty	Call	P	rice	Date	Contracts	Value
Eli Lilly & Co.	UBS AG	Call	USD	50.13	2/04/14	5,000	\$ (19,403)
Pfizer, Inc.	Morgan Stanley & Co. International PLC	Call	USD	30.48	2/04/14	13,900	(1,627)
Vertex Pharmaceuticals, Inc.	Citibank N.A.	Call	USD	66.53	2/04/14	10,700	(133,919)
Roche Holding AG	Deutsche Bank AG	Call	CHF	246.98	2/05/14	10,800	(36,766)
AstraZeneca PLC	Credit Suisse International	Call	GBP	36.26	2/07/14	7,700	(29,579)
Zimmer Holdings, Inc.	Citibank N.A.	Call	USD	92.33	2/07/14	5,000	(9,677)
Zoetis, Inc.	Citibank N.A.	Call	USD	32.24	2/07/14	9,400	(81)
Boston Scientific Corp.	Barclays Bank PLC	Call	USD	12.44	2/10/14	38,500	(44,891)
Varian Medical Systems, Inc.	Goldman Sachs International	Call	USD	83.52	2/26/14	10,000	(9,079)
Charles River Laboratories International,							
Inc.	Deutsche Bank AG	Call	USD	58.45	2/27/14	8,500	(7,511)
St. Jude Medical, Inc.	Bank of America N.A.	Call	USD	67.48	3/03/14	17,800	(1,589)
Chugai Pharmaceutical Co. Ltd.	Goldman Sachs International	Call	JPY	2,347.97	3/05/14	19,100	(10,759)
Bayer AG	Credit Suisse International	Call	EUR	103.63	3/07/14	18,500	(22,569)
Coloplast A/S, Class B	Goldman Sachs International	Call	DKK	387.43	3/07/14	8,600	(49,367)
Mallinckrodt PLC	Morgan Stanley & Co. International PLC	Call	USD	52.99	3/07/14	14,000	(73,871)
Novartis AG	Morgan Stanley & Co. International PLC	Call	CHF	74.59	3/07/14	31,100	(4,534)
Actelion Ltd.	Credit Suisse International	Call	CHF	86.68	3/13/14	6,600	(20,199)
Boston Scientific Corp.	Barclays Bank PLC	Call	USD	13.26	3/14/14	50,000	(40,016)
Johnson & Johnson	Morgan Stanley & Co. International PLC	Call	USD	91.83	3/27/14	3,000	(1,779)
Total							\$ (517 216)

#### BlackRock Health Sciences Trust (BME)

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted price quotations in active markets/exchanges for identical assets or liabilities that the Trust has the ability to access

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 and derivative financial instruments)

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Trust s policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. For information about the Trust s policy regarding valuation of investments and derivative financial instruments, please refer to the Trust s most recent financial statements as contained in its annual report.

The following tables summarize the Trust s investments and derivative financial instruments categorized in the disclosure hierarchy as of January 31, 2014:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments:				
Common Stocks:				
Biotechnology	\$ 84,374,198	\$ 1,776,063	\$ 750,411	\$ 86,900,672
Chemicals	1,338,768			1,338,768
Diversified Consumer Services	1,523,970			1,523,970
Health Care Equipment & Supplies	45,132,748			45,132,748
Health Care Providers & Services	32,372,402			32,372,402
Health Care Technology	1,991,150			1,991,150
Life Sciences Tools & Services	15,091,015			15,091,015
Pharmaceuticals	65,322,026	23,361,367		88,683,393
Short-Term Securities	3,884,083			3,884,083
Total	\$ 251,030,360	\$ 25,137,430	\$ 750,411	\$ 276,918,201
	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments <sup>1</sup>				
Liabilities:				
Equity contracts	\$ (2,426,725)	\$ (528,246)		\$ (2,954,971)

<sup>1</sup> Derivative financial instruments are options written, which are shown at value.

JANUARY 31, 2014

5

**BlackRock Health Sciences Trust (BME)** 

The carrying amount for certain of the Trust s assets and/or liablities approximates fair value for financial reporting purposes. As of January 31, 2014, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Foreign currency at value	\$ 1,338			\$ 1,338
Cash pledged as collateral for options written	2,606,100			2,606,100
Liabilities:				
Bank overdraft		\$ (9,157)		(9,157)
Total	\$ 2,607,438	\$ (9,157)		\$ 2,598,281

BlackRock Health Sciences Trust (BME)

The Trust s investments that are categorized as Level 3 were valued utilizing third party pricing information without adjustment. Such valuations are based on unobservable inputs. A significant change in third party information inputs could result in a significantly lower or higher value of such Level 3 investments.

There were no transfers between Levels during the period ended January 31, 2014.

#### Item 2 Controls and Procedures

- 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 13a-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/ John M. Perlowski John M. Perlowski

Chief Executive Officer (principal executive officer) of

BlackRock Health Sciences Trust

Date: March 25, 2014

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/ John M. Perlowski

John M. Perlowski

Chief Executive Officer (principal executive officer) of

BlackRock Health Sciences Trust

Date: March 25, 2014

By: /s/ Neal J. Andrews

Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock Health Sciences Trust

Date: March 25, 2014