BlackRock Health Sciences Trust Form N-Q May 22, 2015

### **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: John M. Perlowski, Chief Executive Officer, BlackRock Health Sciences

Trust, 55 East 52<sup>nd</sup> Street, New York, NY 10055

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

Date of fiscal year end: 12/31/2015

Date of reporting period: 03/31/2015

Item 1 Schedule of Investments

# Schedule of Investments March 31, 2015 (Unaudited)

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

Common Stocks	Shares	Value
Biotechnology 30.4%	24.200	
Acceleron Pharma, Inc. (a)(b)	24,300	\$ 924,858
Actelion Ltd.	11,600	1,337,869
Agios Pharmaceuticals, Inc. (a)(b)	20,698	1,951,821
Alder Biopharmaceuticals, Inc. (a) Alexion Pharmaceuticals, Inc. (a)(b)	31,300 45,860	903,318 7,947,538
Alkermes PLC (a)(b)	52,500	3,200,925
Alnylam Pharmaceuticals, Inc. (a)(b)	7,418	774,588
Amgen, Inc. (b)	57,300	9,159,405
Anacor Pharmaceuticals, Inc. (a)(b)	10,300	595,855
Aquinox Pharmaceuticals, Inc. (a)	6,400	54,912
Ascendis Pharma A/S ADR (a)	7,700	133,595
BioCryst Pharmaceuticals, Inc. (a)(b)	16,000	144,480
Biogen Idec, Inc. (a)(b)	28,295	11,947,281
BioMarin Pharmaceutical, Inc. (a)(b)	39,800	4,959,876
Bluebird Bio, Inc. (a)(b)	3,000	362,310
Celgene Corp. (a)(b)	91,386	10,534,978
Celldex Therapeutics, Inc. (a)(b)	21,400	596,418
Cellectis SA ADR (a)	8,600	297,474
Clovis Oncology, Inc. (a)(b)	11,100	823,953
Conatus Pharmaceuticals, Inc. (a)	8,200	58,384
Dyax Corp. (a)(b)	39,627	663,950
Genomic Health, Inc. (a)	24,100	736,255
Gilead Sciences, Inc. (a)(b)	48,300	4,739,679
Incyte Corp. (a)(b)	33,900	3,107,274
Infinity Pharmaceuticals, Inc. (a)(b)	49,900	697,602
Intercept Pharmaceuticals, Inc. (a)(b)	5,700	1,607,514
Isis Pharmaceuticals, Inc. (a)(b)	56,900	3,622,823
Karyopharm Therapeutics, Inc. (a)(b) Medivation, Inc. (a)(b)	14,700 23,900	449,967 3,084,773
Neurocrine Biosciences, Inc. (a)(b)	34,962	1,388,341
Protalix BioTherapeutics, Inc. (a)	115,600	205,768
PTC Therapeutics, Inc. (a)(b)	19,800	1,204,830
Puma Biotechnology, Inc. (a)(b)	7,400	1,747,214
Receptos, Inc. (a)(b)	23,800	3,924,382
Regeneron Pharmaceuticals, Inc. (a)(b)	10,958	4,947,318
Sage Therapeutics, Inc. (a)	15,942	800,767
Sarepta Therapeutics, Inc. (a)	34,000	451,520
Seattle Genetics, Inc. (a)(b)	13,367	472,523
Seres Health, Inc. (Acquired 11/24/14,		
Cost \$251,900) (a)(c)	20,710	372,780
Spark Therapeutics, Inc. (a)(b)	8,900	689,750
Synageva BioPharma Corp. (a)(b)	8,700	848,511
Ultragenyx Pharmaceutical, Inc. (a)(b)	42,949	2,666,703
Vertex Pharmaceuticals, Inc. (a)(b)	33,805	3,987,976
Zafgen, Inc. (a)	11,000	435,710
		99,563,768
Health Care Equipment & Supplies 18.0%	160,000	7 505 450
Abbott Laboratories (b)	162,000	7,505,459
Align Technology, Inc. (a)(b)	10,400	559,364
AtriCure, Inc. (a) Baxter International, Inc. (b)	24,162 16,600	495,079 1,137,100
Common Stocks	Shares	Value
Health Care Equipment & Supplies (concluded)	Shares	v aluc
Becton Dickinson and Co. (b)	34,433	\$ 4,944,234
Boston Scientific Corp. (a)(b)	386,800	6,865,700
The Cooper Cos., Inc. (b)	15,000	2,811,300
CR Bard, Inc. (b)	9,200	1,539,620
DexCom, Inc. (a)(b)	22,500	1,402,650
Edwards Lifesciences Corp. (a)(b)(d)	36,899	5,256,632

Endologix, Inc. (a)				18,869	322,094
Insulet Corp. (a)				13,900	463,565
Intuitive Surgical, Inc. (a)(b)				5,900	2,979,677
Masimo Corp. (a)				32,700	1,078,446
Medtronic PLC (b)				131,413	10,248,900
PW Medtech Group Ltd. (a)				156,400	59,046
St. Jude Medical, Inc. (b)				61,000	3,989,400
Stryker Corp. (b)				62,600	5,774,850
Thoratec Corp. (a)(b)				12,100	506,869
Zimmer Holdings, Inc. (b)				8,400	987,168
					59 027 152
Health Care Providers & Services 16.8%					58,927,153
Aetna, Inc. (b)				26,911	2,866,829
AmerisourceBergen Corp. (b)				19,400	2,205,198
Anthem, Inc. (b)				38,800	5,991,108
Cardinal Health, Inc. (b)				67,830	6,123,014
Cigna Corp. (b)				48,900	6,329,616
Express Scripts Holding Co. (a)(b)				25,476	2,210,553
HCA Holdings, Inc. (a)(b)				47,294	3,557,928
HealthEquity, Inc. (a)(b)				5,900	147,441
Humana, Inc. (b)				14,400	2,563,488
McKesson Corp. (b)				37,700	8,527,740
1 1				8,700	
Premier, Inc., Class A (a)					326,946
UnitedHealth Group, Inc. (b)				89,357	10,570,040
Universal Health Services, Inc., Class B (b)				30,200	3,554,842
W. W. G T. I. J					54,974,743
Health Care Technology 0.3%				16,300	1 104 129
Cerner Corp. (a)(b) Life Sciences Tools & Services 3.2%				10,300	1,194,138
				47 100	2 724 550
Charles River Laboratories International, Inc. (a)				47,100	3,734,559
Illumina, Inc. (a)(b)				12,400	2,301,936
Thermo Fisher Scientific, Inc. (b)				33,000	4,433,220
Markinger 0.20					10,469,715
Machinery 0.2% Pall Corp. (b)				6,400	642,496
Pharmaceuticals 29.4%					
AbbVie, Inc. (b)(d)				85,984	5,033,503
Achaogen, Inc. (a)				13,094	127,797
Actavis PLC (a)(b)				35,125	10,453,904
AstraZeneca PLC				63,200	4,336,668
Bayer AG				17,400	2,603,306
Bristol-Myers Squibb Co. (b)				135,600	8,746,200
Doutfolio Abbussistions					
Portfolio Abbreviations ADR American Depositary Receipt	GBP	British Pound	USD	U.S. Dollar	
CHF Swiss Franc	HKD	Hong Kong Dollar	USD	U.S. Dollar	
EUR Euro	JPY	Japanese Yen			
EUK EUIU	Jr I	Japanese 1 en			

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

Common Stocks	Shares	Value
Pharmaceuticals (concluded)	£1 £00	e 1.605.200
Chugai Pharmaceutical Co. Ltd. Dermira, Inc. (a)	51,500 9,300	\$ 1,625,388 142,755
Eli Lilly & Co. (b)	110,100	7,998,765
Intra-Cellular Therapies, Inc. (a)	57,481	1,372,646
Jazz Pharmaceuticals PLC (a)(b)	6,500	1,123,135
Johnson & Johnson (b)	46,370	4,664,822
Mallinckrodt PLC (a)(b)	35,100	4,445,415
Merck & Co., Inc. (b)	110,100	6,328,548
Mylan NV (a)(b)	63,500	3,768,725
Novartis AG	49,500	4,885,674
Perrigo Co. PLC (b)	25,680	4,251,324
Pfizer, Inc. (b)	95,700	3,329,403
Phibro Animal Health Corp., Class A	20,800	736,528
Roche Holding AG	12,500	3,434,901
Shire PLC ADR (b)	14,900	3,565,421
Tetraphase Pharmaceuticals, Inc. (a)(b)	13,500	494,640
Teva Pharmaceutical Industries Ltd. ADR (b)	84,100	5,239,430
Valeant Pharmaceuticals International, Inc. (a)(b)	31,100	6,177,082
Zoetis, Inc. (b)	28,400	1,314,636
Total Common Stocks 98.3%		96,200,616 321,972,629
Preferred Stocks Biotechnology 0.5%	Shares	Value
ProNAi Therapeutics, Inc., Series D (Acquired 4/15/14, cost \$270,735), 0.00% (a)(c) Spark Therapeutics, Inc., 0.00% (a)	386,764 19,210	\$ 270,735 1,414,336
Total Preferred Stocks 0.5% Total Long-Term Investments		1,685,071 1,685,071
(Cost \$201,075,930) 98.8%		323,657,700
Short-Term Securities BlackRock Liquidity Funds, TempFund, Institutional Class, 0.06% (e)(f) Total Short-Term Securities	7,536,121	7,536,121
(Cost \$7,536,121) 2.3% Total Investments Before Options Written		7,536,121
(Cost \$208,612,051*) 101.1%		331,193,821
Options Written (Premiums Received \$2,942,206) (0.9)% Total Investments Net of Options Written 100.2% Liabilities in Excess of Other Assets (0.2)%		(2,892,652) 328,301,169 (773,643)
Net Assets 100.0%		\$ 327,527,526

#### Notes to Schedule of Investments

<sup>\*</sup> As of March 31, 2015, gross unrealized appreciation and gross unrealized depreciation based on cost for federal income tax purposes were as follows:

Tax cost \$ 210,078,579 Gross unrealized appreciation \$ 123,457,631 Gross unrealized depreciation (2,342,389)Net unrealized appreciation \$ 121,115,242 (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 securities as to resale. As of March 31, 2015 the Trust held 0.2% of its net assets, with current market value of \$643,515 and the original cost of \$522,635, in these securities. (d) All or a portion of security has been pledged as collateral in connection with outstanding OTC derivatives. (e) Represents the current yield as of report date. (f) During the period ended March 31, 2015, investments in issuers considered to be an affiliate of the Trust for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

		Net		
	Shares Held at		Shares Held at	
Affiliates	December 31, 2014	Activity	March 31, 2015	Income
BlackRock Liquidity Funds, TempFund, Institutional Class	3,271,616	4,264,505	7,536,121	\$ 931
BlackRock Liquidity Series, LLC Money Market Series				\$ 228

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.

As of March 31, 2015, exchange-traded options written were as follows:

		Str	ike			
	Put/			Expiration		Market
Description	Call	Price		Date	Contracts	Value
AbbVie, Inc.	Call	USD	61.00	4/02/15	145	\$ (725)
Baxter International, Inc.	Call	USD	70.00	4/02/15	40	(200)
Illumina, Inc.	Call	USD	202.50	4/02/15	42	(2,100)

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BlackRock Health Sciences Trust (BME)

As of March 31, 2015, exchange-traded options written were as follows: (continued)

			St	rike			
		Put/			Expiration		Market
Description		Call	Pı	rice	Date	Contracts	Value
Intercept Pharmaceuticals, Inc.		Call	USD	320.00	4/02/15	12	\$ (360)
Medtronic PLC		Call	USD	78.00	4/02/15	124	(5,332)
Merck & Co., Inc.		Call	USD	59.50	4/02/15	65	(195)
Actavis PLC		Call	USD	290.00	4/06/15	102	(87,720)
Anthem, Inc.		Call	USD	148.00	4/06/15	50	(35,125)
Teva Pharmaceutical Industries Ltd.	ADR	Call	USD	58.50	4/06/15	50	(19,250)
Aetna, Inc.		Call	USD	100.00	4/10/15	94	(69,090)
Celgene Corp.		Call	USD	125.00	4/10/15	341	(10,401)
Eli Lilly & Co.		Call	USD	76.50	4/10/15	110	(770)
Express Scripts Holding Co.		Call	USD USD	85.50 79.00	4/10/15 4/10/15	31 119	(6,820)
Medtronic PLC Puma Biotechnology, Inc.		Call Call	USD	230.00	4/10/15	20	(5,296) (27,900)
Teva Pharmaceutical Industries Ltd.	ADR	Call	USD	57.50	4/10/15	77	(38,115)
UnitedHealth Group, Inc.	ADR	Call	USD	116.00	4/10/15	310	(102,300)
Abbott Laboratories		Call	USD	48.00	4/17/15	192	(2,112)
AbbVie, Inc.		Call	USD	62.50	4/17/15	152	(1,140)
Acceleron Pharma, Inc.		Call	USD	45.00	4/17/15	52	(2,600)
Agios Pharmaceuticals, Inc.		Call	USD	115.00	4/17/15	72	(6,480)
Alexion Pharmaceuticals, Inc.		Call	USD	190.00	4/17/15	90	(4,950)
Align Technology, Inc.		Call	USD	60.00	4/17/15	40	(600)
Alkermes PLC		Call	USD	70.00	4/17/15	69	(1,898)
Alnylam Pharmaceuticals, Inc.		Call	USD	130.00	4/17/15	26	(520)
Amgen, Inc.		Call	USD	165.00	4/17/15	110	(16,280)
Anacor Pharmaceuticals, Inc.		Call	USD	41.90	4/17/15	37	(59,079)
Anthem, Inc.		Call	USD	150.00	4/17/15	85	(50,362)
Becton Dickinson and Co.		Call	USD	150.00	4/17/15	115	(3,450)
BioCryst Pharmaceuticals, Inc.		Call	USD	11.00	4/17/15	56	(532)
BioMarin Pharmaceutical, Inc.		Call	USD	105.00	4/17/15	136	(275,400)
Bluebird Bio, Inc.		Call	USD	155.00	4/17/15	11	(522)
Boston Scientific Corp.		Call	USD	17.00	4/17/15	538	(48,420)
Bristol-Myers Squibb Co.		Call	USD	67.50	4/17/15	70	(1,470)
Cardinal Health, Inc.		Call	USD	92.50	4/17/15	235	(11,162)
Cerner Corp.		Call	USD	70.75	4/17/15	121	(41,950)
Cigna Corp.		Call	USD	120.00	4/17/15	165	(165,825)
Cigna Corp.		Call	USD	130.00	4/17/15	4	(862)
Clovis Oncology, Inc.		Call	USD	75.00	4/17/15	38	(12,920)
CR Bard, Inc.		Call	USD	175.00	4/17/15	16	(640)
CR Bard, Inc. DexCom, Inc.		Call	USD	180.00	4/17/15	16 79	(800)
		Call	USD USD	65.00	4/17/15	200	(5,530) (35,500)
Dyax Corp. Edwards Lifesciences Corp.		Call Call	USD	17.50 150.00	4/17/15 4/17/15	128	(8,000)
Eli Lilly & Co.		Call	USD	70.00	4/17/15	65	(20,475)
Eli Lilly & Co.		Call	USD	72.50	4/17/15	143	(18,733)
Gilead Sciences, Inc.		Call	USD	105.00	4/17/15	52	(1,794)
HCA Holdings, Inc.		Call	USD	75.00	4/17/15	164	(29,520)
HealthEquity, Inc.		Call	USD	25.00	4/17/15	20	(1,900)
Intuitive Surgical, Inc.		Call	USD	510.00	4/17/15	20	(15,500)
Isis Pharmaceuticals, Inc.		Call	USD	70.00	4/17/15	175	(16,188)
Johnson & Johnson		Call	USD	100.50	4/17/15	160	(23,405)
McKesson Corp.		Call	USD	230.00	4/17/15	63	(11,812)
Merck & Co., Inc.		Call	USD	60.00	4/17/15	320	(4,320)
Mylan NV		Call	USD	57.50	4/17/15	223	(67,792)
Neurocrine Biosciences, Inc.		Call	USD	46.00	4/17/15	122	(4,880)
Pall Corp.		Call	USD	105.00	4/17/15	22	(605)
Perrigo Co. PLC		Call	USD	175.00	4/17/15	90	(7,200)

PTC Therapeutics, Inc.	Call	USD	80.00	4/17/15	69	(2,242)
Receptos, Inc.	Call	USD	122.75	4/17/15	57	(240,753)
Receptos, Inc.	Call	USD	145.00	4/17/15	32	(81,920)
Shire PLC ADR	Call	USD	250.00	4/17/15	13	(4,160)
St. Jude Medical, Inc.	Call	USD	70.00	4/17/15	197	(2,955)
Stryker Corp.	Call	USD	95.00	4/17/15	212	(10,070)
Tetraphase Pharmaceuticals, Inc.	Call	USD	50.00	4/17/15	42	(1,680)
Thoratec Corp.	Call	USD	41.00	4/17/15	42	(9,240)

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**BlackRock Health Sciences Trust (BME)** 

As of March 31, 2015, exchange-traded options written were as follows: (concluded)

		Stı	rike			Market
	Put/			Expiration		
Description	Call	Pr	ice	Date	Contracts	Value
Ultragenyx Pharmaceutical, Inc.	Call	USD	65.00	4/17/15	150	\$ (34,500)
Universal Health Services, Inc., Class B	Call	USD	120.00	4/17/15	107	(14,445)
Valeant Pharmaceuticals International, Inc.	Call	USD	200.00	4/17/15	107	(49,755)
Vertex Pharmaceuticals, Inc.	Call	USD	125.00	4/17/15	95	(23,988)
Zimmer Holdings, Inc.	Call	USD	120.00	4/17/15	45	(4,950)
Zoetis, Inc.	Call	USD	46.00	4/17/15	96	(12,000)
Alexion Pharmaceuticals, Inc.	Call	USD	187.50	4/24/15	71	(16,685)
Baxter International, Inc.	Call	USD	68.50	4/24/15	18	(2,043)
Biogen Idec, Inc.	Call	USD	432.50	4/24/15	48	(64,320)
Eli Lilly & Co.	Call	USD	77.00	4/24/15	63	(1,638)
Pfizer, Inc.	Call	USD	35.00	4/24/15	55	(2,585)
Seattle Genetics, Inc.	Call	USD	38.90	4/24/15	50	(2,462)
Teva Pharmaceutical Industries Ltd. ADR	Call	USD	62.00	4/24/15	58	(10,440)
Teva Pharmaceutical Industries Ltd. ADR	Call	USD	63.00	4/24/15	55	(7,122)
Thermo Fisher Scientific, Inc.	Call	USD	137.01	4/24/15	108	(16,260)
Incyte Corp.	Call	USD	97.25	4/28/15	115	(34,839)
Amgen, Inc.	Call	USD	162.50	5/01/15	88	(36,080)
Biogen Idec, Inc.	Call	USD	437.50	5/01/15	51	(68,085)
Bristol-Myers Squibb Co.	Call	USD	69.50	5/01/15	400	(15,400)
Express Scripts Holding Co.	Call	USD	86.50	5/01/15	19	(6,061)
Gilead Sciences, Inc.	Call	USD	105.00	5/01/15	52	(7,384)
Isis Pharmaceuticals, Inc.	Call	USD	71.00	5/01/15	20	(3,500)
Jazz Pharmaceuticals PLC	Call	USD	195.00	5/01/15	23	(4,428)
Mallinckrodt PLC	Call	USD	127.00	5/01/15	121	(58,080)
Medivation, Inc.	Call	USD	138.00	5/01/15	82	(25,912)
Medtronic PLC	Call	USD	79.50	5/01/15	212	(21,306)
Pfizer, Inc.	Call	USD	35.00	5/01/15	275	(16,912)
Teva Pharmaceutical Industries Ltd. ADR	Call	USD	62.00	5/01/15	58	(12,122)
Abbott Laboratories	Call	USD	47.60	5/15/15	370	(21,901)
Acceleron Pharma, Inc.	Call	USD	45.00	5/15/15	33	(15,840)
AmerisourceBergen Corp.	Call	USD	115.00	5/15/15	67	(20,770)
Celldex Therapeutics, Inc.	Call	USD	31.00	5/15/15	75	(9,375)
The Cooper Cos., Inc.	Call	USD	185.00	5/15/15	50	(31,250)
Express Scripts Holding Co.	Call	USD	85.00	5/15/15	20	(8,500)
Express Scripts Holding Co.	Call	USD	87.50	5/15/15	19	(5,424)
Gilead Sciences, Inc.	Call	USD	105.00	5/15/15	63	(11,938)
Humana, Inc.	Call	USD	180.00	5/15/15	50	(31,250)
Infinity Pharmaceuticals, Inc.	Call	USD	17.00	5/15/15	85	(2,550)
Infinity Pharmaceuticals, Inc.	Call	USD	18.00	5/15/15	85	(1,488)
Karyopharm Therapeutics, Inc.	Call	USD	35.00	5/15/15	76	(10,830)
McKesson Corp.	Call	USD	240.00	5/15/15	64	(11,360)
Regeneron Pharmaceuticals, Inc.	Call	USD	500.00	5/15/15	39	(31,200)
Spark Therapeutics, Inc.	Call	USD	85.00	5/15/15	31	(14,570)
Alnylam Pharmaceuticals, Inc.	Put	USD	90.00	4/17/15	17	(1,020)
Alnylam Pharmaceuticals, Inc.	Put	USD	95.00	4/17/15	17	(2,168)
Synageva BioPharma Corp.	Put	USD	85.00	4/17/15	18	(1,530)
Synageva BioPharma Corp.	Put	USD	90.00	4/17/15	18	(3,015)
Total						\$ (2,557,128)

As of March 31, 2015, over-the-counter options written were as follows:

## Strike

		Put/			Expiration		Market
Description	Counterparty	Call	Pr	ice	Date	Contracts	Value
Masimo Corp.	Deutsche Bank AG	Call	USD	31.17	4/08/15	11,300	\$ (21,275)
PW Medtech Group Ltd.	BNP Paribas S.A.	Call	HKD	2.93	4/08/15	95,000	(759)
Alder Biopharmaceuticals, Inc.	Morgan Stanley & Co. International PLC	Call	USD	27.13	4/09/15	11,000	(25,782)
AstraZeneca PLC	UBS AG	Call	GBP	45.15	4/14/15	10,400	(21,129)
Roche Holding AG	Bank of America N.A.	Call	CHF	262.94	4/14/15	1,500	(9,881)
Novartis AG	UBS AG	Call	CHF	97.72	4/23/15	13,600	(11,813)
Intra-Cellular Therapies, Inc.	Barclays Bank PLC	Call	USD	26.00	4/27/15	22,000	(23,553)
Actelion Ltd.	Bank of America N.A.	Call	CHF	119.85	4/28/15	4,000	(4,158)
AstraZeneca PLC	Goldman Sachs International	Call	GBP	47.78	4/28/15	11,500	(6,535)
Bayer AG	Goldman Sachs International	Call	EUR	142.05	4/28/15	6,000	(16,974)

MARCH 31, 2015

BlackRock Health Sciences Trust (BME)

As of March 31, 2015, over-the-counter options written were as follows: (concluded)

	Strike						
Description	Counterparty	Put/ Call	P	rice	Expiration Date	Contracts	Market Value
Charles River Laboratories International,	Morgan Stanley & Co. International						
Inc.	PLC	Call	USD	76.80	5/04/15	16,300	\$ (63,550)
Boston Scientific Corp.	Citibank N.A.	Call	USD	18.26	5/05/15	80,300	(31,531)
St. Jude Medical, Inc.	Citibank N.A.	Call	USD	66.67	5/05/15	1,500	(2,174)
Novartis AG	UBS AG	Call	CHF	99.23	5/06/15	6,800	(5,710)
Roche Holding AG	UBS AG	Call	CHF	263.07	5/06/15	2,500	(21,167)
Sage Therapeutics, Inc.	Goldman Sachs International	Call	USD	47.50	5/07/15	6,500	(34,839)
Shire PLC ADR	Citibank N.A.	Call	USD	255.19	5/12/15	4,000	(14,427)
Chugai Pharmaceutical Co. Ltd.	Bank of America N.A.	Call	JPY	3,841.78	5/20/15	18,000	(20,267)
Total							\$ (335,524)

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. 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. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instruments and is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices 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)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Trust spolicy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Trust spolicy regarding valuation of investments and derivative financial instruments, refer to the Trust s most recent financial statements as contained in its annual report.

As of March 31, 2015, the following tables summarize the Trust s investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments:				
Common Stocks:				
Biotechnology	\$ 97,853,119	\$ 1,337,869	\$ 372,780	\$ 99,563,768
Health Care Equipment & Supplies	58,868,107	59,046		58,927,153

Health Care Providers & Services	54,974,743			54,974,743
Health Care Technology	1,194,138			1,194,138
Life Sciences Tools & Services	10,469,715			10,469,715
Machinery	642,496			642,496
Pharmaceuticals	79,314,679	16,885,937		96,200,616
Preferred Stocks		1,414,336	270,735	1,685,071
Short-Term Securities	7,536,121			7,536,121
Total	\$ 310,853,118	\$ 19,697,188	\$ 643,515	\$ 331,193,821
	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments <sup>1</sup>				
Liabilities:	d (2.116.400)	Φ (77.6.172)		ф. (2.002.(52)
Equity contracts.	\$ (2,116,480)	\$ (776,172)		\$ (2,892,652)

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

MARCH 31, 2015

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**BlackRock Health Sciences Trust (BME)** 

The Trust may hold assets in which the fair value approximates the carrying amount for financial reporting purposes. As of March 31, 2015, such assets are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2 I	Level 3	Total
Assets:				
Cash	\$ 196,150			\$ 196,150
Foreign currency at value	264,341			264,341
Cash collateral on exchange-traded options written	660,975			660,975
Total	\$ 1,121,466			\$ 1,121,466

During the period ended March 31, 2015, there were no transfers between levels.

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#### 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: May 22, 2015

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: May 22, 2015

By: /s/ Neal J. Andrews

Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock Health Sciences Trust

Date: May 22, 2015