BlackRock Health Sciences Trust Form N-Q May 23, 2016

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 52nd Street, New York, NY 10055

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

Date of fiscal year end: 12/31/2016

Date of reporting period: 03/31/2016

Item 1 Schedule of Investments

Schedule of Investments March 31, 2016 (Unaudited)

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

Common Stocks	Shares		Value
Biotechnology 22.5%	20.707	ф	1.750.406
AbbVie, Inc. (a)	30,786	\$	1,758,496
Acceleron Pharma, Inc. (b)	29,400		775,865
Acerta Pharma BV, Series B (Acquired 02/01/16, cost \$986,402) (b)(c)	17,146,440		1,424,869
Actelion Ltd.	6,700		999,906
Alder Biopharmaceuticals, Inc. (a)(b) Alexion Pharmaceuticals, Inc. (a)(b)	10,100		247,349 2,570,001
Alkermes PLC (b)	18,460 16,800		574,392
Alnylam Pharmaceuticals, Inc. (b)	9,900		621,423
Amgen, Inc. (a)	58,122		8,714,231
Anacor Pharmaceuticals, Inc. (b)	34,600		1,849,370
Aquinox Pharmaceuticals, Inc. (b)	15,900		140,238
Avexis, Inc. (b)	9,026		245,868
Axovant Sciences Ltd. (b)	12,100		138,908
Baxalta, Inc. (a)	67,000		2,706,800
Biogen, Inc. (a)(b)	17,348		4,516,031
BioMarin Pharmaceutical, Inc. (a)(b)	13,500		1,113,480
Celgene Corp. (a)(b)	107,486		10,758,274
Corvus Pharmaceuticals, Inc. (b)	3,975		57,638
Corvus Pharmaceuticals, Inc. (Acquired 03/23/16, cost \$297,937) (b)(c)	21,266		292,939
CytomX Therapeutics, Inc. (Acquired 10/8/15, cost \$261,307) (b)(c)	28,059		343,863
Genomic Health, Inc. (b)	22,400		554,848
Gilead Sciences, Inc. (a)	48,700		4,473,582
Incyte Corp. (a)(b)	13,800		1,000,086
Infinity Pharmaceuticals, Inc. (b)	46,400		244,528
Inotek Pharmaceuticals Corp. (b)	30,196		223,450
Ionis Pharmaceuticals, Inc. (a)(b)	46,300		1,875,150
Medivation, Inc. (a)(b)	52,100		2,395,558
Neurocrine Biosciences, Inc. (a)(b)	41,262		1,631,912
Otonomy, Inc. (b)	8,400		125,328
Prothena Corp. PLC (a)(b)	4,344		178,799
PTC Therapeutics, Inc. (b)	30,300		195,132
Regeneron Pharmaceuticals, Inc. (a)(b)	5,258		1,895,194
REGENXBIO, Inc. (b)	35,850		387,180
Sage Therapeutics, Inc. (b)	5,342		171,265
Seattle Genetics, Inc. (a)(b)	14,867		521,683
Seres Therapeutics, Inc. (b)	35,910		953,770
Syndax Pharmaceuticals, Inc. (b)	13,956		185,894
Syndax Pharmaceuticals, Inc. (Acquired 03/02/16, cost \$495,682) (b)(c)	35,428		448,306
Ultragenyx Pharmaceutical, Inc. (a)(b)	13,815		874,628
Vertex Pharmaceuticals, Inc. (a)(b)	24,305		1,932,004
			60,118,238
Electronic Equipment, Instruments & Components 0.6%			
FEI Co. (a)	18,800		1,673,388
Health Care Equipment & Supplies 20.2%			
Abbott Laboratories (a)	121,500		5,082,344
Baxter International, Inc. (a)	72,500		2,978,300
Becton Dickinson and Co. (a)	16,833		2,555,586
Common Stocks	Shares		Value
Health Care Equipment & Supplies (continued)			
Boston Scientific Corp. (b)	548,900	\$	10,324,809
CONMED Corp.	12,000		503,280
Cooper Cos., Inc. (a)	18,366		2,827,813
CR Bard, Inc. (a)	17,500		3,546,725
Edwards Lifesciences Corp. (a)(b)	45,098		3,978,095
Insulet Corp. (b)	5,800		192,328
Masimo Corp. (a)(b)	10,000		418,400
Medtronic PLC (a)	171,900		12,892,500
St. Jude Medical, Inc. (a)	84,800		4,664,000
Stryker Corp. (a)	35,100		3,765,879

					53,730,059
Health Care Providers & Services 22.0%					
Aetna, Inc. (a)				43,811	4,922,165
Amedisys, Inc. (a)(b)				38,600	1,865,924
AmerisourceBergen Corp. (a)				20,000	1,731,000
Anthem, Inc. (a)				50,300	6,991,197
Cardinal Health, Inc. (a)				45,330	3,714,794
Cigna Corp. (a)				39,100	5,366,084
DaVita HealthCare Partners, Inc. (a)(b)				35,419	2,599,046
Express Scripts Holding Co. (a)(b)				22,176	1,523,269
HCA Holdings, Inc. (a)(b)				11,394	889,302
HealthEquity, Inc. (a)(b)				16,900	416,923
Humana, Inc. (a)				29,300	5,360,435
McKesson Corp.				27,900	4,387,275
Teladoc, Inc. (b)				18,800	180,480
UnitedHealth Group, Inc. (a)(d)				117,102	15,094,448
Universal Health Services, Inc., Class B (a)				23,600	2,943,392
WellCare Health Plans, Inc. (a)(b)				7,100	658,525
W. M. C. T. L. L. A.50					58,644,259
Health Care Technology 0.5% Cerner Corp. (a)(b)				24,800	1,313,408
Life Sciences Tools & Services 1.8%					
Bio-Rad Laboratories, Inc., Class A (a)(b)				4,600	628,912
Thermo Fisher Scientific, Inc. (a)				29,900	4,233,541
Dharmacouticals 27.6%					4,862,453
Pharmaceuticals 27.6% Allergan PLC (a)(b)				35,325	9,468,160
AstraZeneca PLC				77,100	4,304,620
Bristol-Myers Squibb Co. (a)				126,430	8,076,348
Chugai Pharmaceutical Co. Ltd.				23,800	736,452
Dermira, Inc. (a)(b)				15,400	318,472
Eli Lilly & Co. (a)				119,600	8,612,396
GlaxoSmithKline PLC				102,800	2,081,000
GlaxoSmithKline PLC ADR (a)				33,200	1,346,260
Intra-Cellular Therapies, Inc. (b)				54,481	1,514,572
Jazz Pharmaceuticals PLC (a)(b)				11,700	1,527,435
Johnson & Johnson (a)				55,270	5,980,214
Mallinckrodt PLC (a)(b)				23,143	1,418,203
Merck & Co., Inc. (a)				112,100	5,931,211
Portfolio Abbreviations					
ADR American Depositary Receipt	EUR	Euro	USD	U.S. Dollar	
CHF Swiss Franc CVR Contingent Value Rights	GBP JPY	British Pound Japanese Yen	352		

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BlackRock Health Sciences Trust (BME)

Common Stocks Pharmaceuticals (continued)	Shares	Value
Merck KGaA Mylan NV (a)(b) Nektar Therapeutics (b) Pfizer, Inc. (a) Phibro Animal Health Corp., Class A Roche Holding AG Shire PLC ADR (a) Teva Pharmaceutical Industries Ltd. ADR (a) UCB SA Zoetis, Inc. (a)	15,800 57,100 105,300 140,900 21,800 10,800 16,000 75,300 12,500 38,100	\$ 1,314,306 2,646,585 1,447,875 4,176,276 589,472 2,651,835 2,750,400 4,029,303 954,192 1,688,973
Total Common Stocks 95.2%		73,564,560 253,906,365
Preferred Stocks Biotechnology 0.5% Afferent Pharmaceuticals, Inc., Series C (Acquired 6/30/15, cost \$466,519), 0.00% (b)(c) Intellia Therapeutics, Inc. (Acquired 8/19/15, cost \$248,567), 0.00% (b)(c) Ovid Therapeutics, Inc. (Acquired 8/7/15, cost \$503,166), 0.00% (b)(c) Total Preferred Stocks 0.5% Rights 0.0% Biotechnology 0.0% Dyax Corp. CVR (b)	190,160 47,346 80,765 Shares 61,727	\$ 466,520 248,568 503,166 1,218,254 Value 68,517
Total Long-Term Investments		
(Cost \$189,184,978) 95.7% Short-Term Securities		255,193,136
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.37% (e)(f) Total Short-Term Securities	13,168,573	13,168,573
(Cost \$13,168,573) 4.9% Total Investments Before Options Written		13,168,573
(Cost \$202,353,551*) 100.6%		268,361,709
Options Written (Premiums Received \$1,974,811) (0.9)% Total Investments Net of Options Written 99.7% Other Assets Less Liabilities 0.3%		(2,276,774) 266,084,935 741,995
Net Assets 100.0%		\$ 266,826,930

Notes to Schedule of Investments

Tax cost \$204,437,893

Gross unrealized appreciation \$69,249,722
Gross unrealized depreciation (5,325,906)

^{*} As of period end, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

Net unrealized appreciation			\$	63,923,816
(a) All or a portion of security has been pledged and/or segregated as collateral in connection	on with outstanding excha	nge-traded opt	ions written.	
(b) Non-income producing security.				
(c) Restricted securities as to resale, excluding 144A securities. As of period end, the Trust original cost of \$3,259,581 which was 1.4% of its net assets.	held restricted securities	with a current	value of \$3,728,23	31 and an
(d) All or a portion of security has been pledged as collateral in connection with outstanding	g OTC derivatives.			
(e) Current yield as of period end.				
(f) During the period ended March 31, 2016, investments in issuers considered to be affilia Company Act of 1940, as amended, were as follows:	ates of the Trust for purpos	ses of Section 2	2(a)(3) of the Inve	estment
Affiliatos	Shares Held at December 31,	Net Activity	Shares Held at March 31,	Incomo

8,854,560

4,314,013

13,168,573

\$ 13,984 \$ 69¹

\$ 14,053

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BlackRock Liquidity Funds, TempFund, Institutional Class BlackRock Liquidity Series, LLC Money Market Series

Total

Represents securities lending income earned from the reinvestment of cash collateral from loaned securities, net of fees, and collateral investment expenses, and other payments to and from borrowers of securities.

BlackRock Health Sciences Trust (BME)

For Trust compliance purposes, the Trust s industry 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.

Derivative Financial Instruments Outstanding as of Period End Exchange-Traded Options Written

			St	rike		
	Put/	Expiration				
Description	Call	Date	P	rice	Contracts	Value
AbbVie, Inc.	Call	4/01/16	USD	58.50	13	\$ (65)
Aetna, Inc.	Call	4/01/16	USD	109.00	16	(6,080)
Aetna, Inc.	Call	4/01/16	USD	110.00	16	(4,328)
Aetna, Inc.	Call	4/01/16	USD	112.00	12	(1,121)
Alexion Pharmaceuticals, Inc.	Call	4/01/16	USD	152.50	63	(630)
Anthem, Inc.	Call	4/01/16	USD	125.00	88	(120,780)
Baxter International, Inc.	Call	4/01/16	USD	40.00	22	(2,485)
Bristol-Myers Squibb Co.	Call	4/01/16	USD	65.00	72	(288)
Eli Lilly & Co.	Call	4/01/16	USD	77.00	195	(390)
Johnson & Johnson	Call	4/01/16	USD	107.00	53	(6,492)
Medtronic PLC	Call	4/01/16	USD	75.00	274	(7,946)
Merck & Co., Inc.	Call	4/01/16	USD	52.00	310	(29,605)
Mylan NV	Call	4/01/16	USD	48.50	100	(200)
Pfizer, Inc.	Call	4/01/16	USD	30.50	24	(24)
UnitedHealth Group, Inc.	Call	4/01/16	USD	122.00	37	(25,530)
Abbott Laboratories	Call	4/04/16	USD	39.50	100	(23,327)
Becton Dickinson and Co.	Call	4/06/16	USD	150.01	60	(14,075)
AbbVie, Inc.	Call	4/08/16	USD	59.00	13	(195)
Aetna, Inc.	Call	4/08/16	USD	110.00	62	(21,080)
Baxter International, Inc.	Call	4/08/16	USD	40.00	80	(11,080)
Baxter International, Inc.	Call	4/08/16	USD	40.50	23	(1,874)
Biogen, Inc.	Call	4/08/16	USD	275.00	68	(6,460)
Bristol-Myers Squibb Co.	Call	4/08/16	USD	65.00	100	(2,700)
Celgene Corp.	Call	4/08/16	USD	107.00	15	(165)
Mallinckrodt PLC	Call	4/08/16	USD	67.00	40	(1,600)
Medtronic PLC	Call	4/08/16	USD	77.50	48	(192)
Pfizer, Inc.	Call	4/08/16	USD	31.50	51	(102)
Teva Pharmaceutical Industries Ltd. ADR	Call	4/08/16	USD	59.50	19	(76)
UnitedHealth Group, Inc.	Call	4/08/16	USD	122.00	185	(134,588)
UnitedHealth Group, Inc.	Call	4/08/16	USD	124.00	12	(6,510)
Zoetis, Inc.	Call	4/08/16	USD	44.50	60	(3,300)
Cardinal Health, Inc.	Call	4/12/16	USD	84.00	76	(1,802)
Cerner Corp.	Call	4/13/16	USD	54.00	42	(1,859)
Abbott Laboratories	Call	4/15/16	USD	42.00	150	(5,774)
Aetna, Inc.	Call	4/15/16	USD	115.00	15	(1,778)
Alder Biopharmaceuticals, Inc.	Call	4/15/16	USD	25.00	47	(6,580)
Amedisys, Inc.	Call	4/15/16	USD	46.00	136	(39,916)
Amgen, Inc.	Call	4/15/16	USD	155.00	24	(1,788)
Anthem, Inc.	Call	4/15/16	USD	140.00	7	(1,568)
Becton Dickinson and Co.	Call	4/15/16	USD	150.00	11	(3,272)
BioMarin Pharmaceutical, Inc.	Call	4/15/16	USD	85.00	27	(6,412)
Bristol-Myers Squibb Co.	Call	4/15/16	USD	62.50	77	(14,014)
Cigna Corp.	Call	4/15/16	USD	140.00	62	(11,594)
Cooper Cos., Inc.	Call	4/15/16	USD	150.00	33	(20,130)
CR Bard, Inc.	Call	4/15/16	USD	190.00	50	(63,750)
DaVita HealthCare Partners, Inc.	Call	4/15/16	USD	65.00	35	(29,750)
DaVita HealthCare Partners, Inc.	Call	4/15/16	USD	72.50	35	(5,250)
	Call	4/15/16	USD	90.00	80	(19,600)
Edwards Lifesciences Corp.					32	` ' '
Gilead Sciences, Inc.	Call	4/15/16	USD	92.50	32	(4,352)

HealthEquity, Inc.	Call	4/15/16	USD	25.00	59	(4,868)
Humana, Inc.	Call	4/15/16	USD	180.00	92	(59,800)
Incyte Corp.	Call	4/15/16	USD	70.00	50	(25,250)
Jazz Pharmaceuticals PLC	Call	4/15/16	USD	125.00	20	(16,200)
Masimo Corp.	Call	4/15/16	USD	40.00	35	(6,038)
Medivation, Inc.	Call	4/15/16	USD	41.00	100	(58,750)
Medtronic PLC	Call	4/15/16	USD	77.50	130	(1,495)
Merck & Co., Inc.	Call	4/15/16	USD	52.50	27	(2,390)

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BlackRock Health Sciences Trust (BME)

			St	rike		
	Put/	Expiration				
Description	Call	Date		rice	Contracts	Value
Neurocrine Biosciences, Inc.	Call	4/15/16	USD	44.00	145	\$ (3,625)
Pfizer, Inc. Regeneron Pharmaceuticals, Inc.	Call Call	4/15/16 4/15/16	USD USD	31.00 400.00	97 10	(437) (1,350)
Seattle Genetics, Inc.	Call	4/15/16	USD	35.00	50	(9,000)
Stryker Corp.	Call	4/15/16	USD	105.00	23	(7,245)
Teva Pharmaceutical Industries Ltd. ADR	Call	4/15/16	USD	60.00	63	(315)
Thermo Fisher Scientific, Inc.	Call	4/15/16	USD	140.00	52	(15,600)
Ultragenyx Pharmaceutical, Inc.	Call	4/15/16	USD	75.00	50	(2,500)
UnitedHealth Group, Inc.	Call	4/15/16	USD	125.00	24	(11,460)
Universal Health Services, Inc., Class B	Call	4/15/16	USD	115.00	41	(43,050)
Aetna, Inc.	Call	4/22/16	USD	111.00	16	(5,600)
Allergan PLC	Call	4/22/16	USD	290.00	76	(28,120)
Bristol-Myers Squibb Co.	Call	4/22/16	USD	62.50	77	(16,401)
Bristol-Myers Squibb Co.	Call	4/22/16	USD	63.50	43	(6,170)
Express Scripts Holding Co.	Call	4/22/16	USD	70.00	39	(4,290)
Mallinckrodt PLC Medtronic PLC	Call Call	4/22/16 4/22/16	USD USD	67.00	40 57	(5,500)
Merck & Co., Inc.	Call	4/22/16	USD	77.00 53.50	55	(2,052) (2,695)
Pfizer, Inc.	Call	4/22/16	USD	31.00	70	(525)
UnitedHealth Group, Inc.	Call	4/22/16	USD	123.00	25	(18,688)
Vertex Pharmaceuticals, Inc.	Call	4/22/16	USD	89.00	43	(4,838)
FEI Co.	Call	4/27/16	USD	87.01	65	(25,619)
AbbVie, Inc.	Call	4/29/16	USD	57.50	41	(5,637)
Allergan PLC	Call	4/29/16	USD	285.00	38	(14,820)
Amgen, Inc.	Call	4/29/16	USD	150.00	89	(38,715)
Baxter International, Inc.	Call	4/29/16	USD	40.50	15	(2,108)
Baxter International, Inc.	Call	4/29/16	USD	41.50	60	(4,860)
Celgene Corp.	Call	4/29/16	USD	105.00	267	(43,254)
Eli Lilly & Co.	Call	4/29/16	USD	73.00	75	(11,475)
Gilead Sciences, Inc. HCA Holdings, Inc.	Call Call	4/29/16 4/29/16	USD USD	94.00 74.50	69 39	(12,730) (19,305)
Humana, Inc.	Call	4/29/16	USD	187.50	10	(3,950)
Ionis Pharmaceuticals, Inc.	Call	4/29/16	USD	42.00	160	(44,000)
Jazz Pharmaceuticals PLC	Call	4/29/16	USD	125.00	20	(19,300)
Johnson & Johnson	Call	4/29/16	USD	108.00	109	(21,037)
Medtronic PLC	Call	4/29/16	USD	77.50	58	(2,117)
Mylan NV	Call	4/29/16	USD	48.50	100	(10,000)
UnitedHealth Group, Inc.	Call	4/29/16	USD	131.00	126	(30,681)
Vertex Pharmaceuticals, Inc.	Call	4/29/16	USD	89.00	43	(7,848)
Zoetis, Inc.	Call	4/29/16	USD	44.00	73	(10,403)
AbbVie, Inc.	Call Call	5/06/16	USD USD	58.00	41 16	(5,330)
Aetna, Inc.	Call	5/06/16 5/06/16	USD	113.00 150.00	3	(5,640) (1,432)
Amgen, Inc. Medtronic PLC	Call	5/06/16	USD	75.00	33	(5,115)
Pfizer, Inc.	Call	5/06/16	USD	30.50	21	(651)
Stryker Corp.	Call	5/06/16	USD	105.20	50	(26,150)
Cardinal Health, Inc.	Call	5/12/16	USD	81.10	82	(22,318)
Abbott Laboratories	Call	5/20/16	USD	41.00	176	(26,840)
AmerisourceBergen Corp.	Call	5/20/16	USD	90.00	71	(8,875)
Amgen, Inc.	Call	5/20/16	USD	150.00	89	(47,170)
Anthem, Inc.	Call	5/20/16	USD	145.00	81	(23,328)
Baxalta, Inc.	Call	5/20/16	USD	40.00	150	(25,875)
BioMarin Pharmaceutical, Inc.	Call	5/20/16	USD	90.00	27	(10,935)
Bio-Rad Laboratories, Inc., Class A Celgene Corp.	Call Call	5/20/16 5/20/16	USD USD	140.00 105.00	16 95	(5,680) (25,080)
Cooper Cos., Inc.	Call	5/20/16	USD	150.00	33	(25,080)
DaVita HealthCare Partners, Inc.	Call	5/20/16	USD	75.00	50	(6,625)
Dermira, Inc.	Call	5/20/16	USD	25.00	54	(9,585)
Edwards Lifesciences Corp.	Call	5/20/16	USD	87.50	80	(44,800)
Express Scripts Holding Co.	Call	5/20/16	USD	72.50	39	(4,778)

Gilead Sciences, Inc.	Call	5/20/16	USD	92.50	70	(22,750)
GlaxoSmithKline PLC - ADR	Call	5/20/16	USD	41.00	116	(9,280)
Medivation, Inc.	Call	5/20/16	USD	40.00	86	(75,680)
Pfizer, Inc.	Call	5/20/16	USD	31.00	191	(4,489)
Prothena Corp. PLC	Call	5/20/16	USD	55.00	15	(1,650)

MARCH 31, 2016

BlackRock Health Sciences Trust (BME)

	Strike						
Description	Put/ Call	Expiration Date	Pı	rice	Contracts		Value
Regeneron Pharmaceuticals, Inc.	Call	5/20/16	USD	400.00	10	\$	(7,700)
Shire PLC ADR	Call	5/20/16	USD	175.00	28		(26,040)
St. Jude Medical, Inc.	Call	5/20/16	USD	55.00	296		(61,420)
Stryker Corp.	Call	5/20/16	USD	105.20	50		(29,781)
Teva Pharmaceutical Industries Ltd. ADR	Call	5/20/16	USD	57.50	45		(3,308)
Thermo Fisher Scientific, Inc.	Call	6/17/16	USD	140.00	52		(31,980)
WellCare Health Plans, Inc.	Call	6/17/16	USD	95.00	24		(12,000)
Total						\$ ((1,983,108)

OTC Options Written

O10 options written				S	trike		
	Put/		Expiration				
Description	Call	Counterparty	Date	P	rice	Contracts	Value
AstraZeneca PLC	Call	Credit Suisse International	4/05/16	GBP	44.47	10,000	\$
UCB SA		Morgan Stanley & Co. International					
	Call	PLC	4/05/16	EUR	75.07	4,300	(4)
Cigna Corp.	Call	Citibank N.A.	4/06/16	USD	143.37	7,400	(729)
Allergan PLC	Call	Bank of America N.A.	4/12/16	USD	288.86	500	(332)
AstraZeneca PLC	Call	Credit Suisse International	4/12/16	GBP	40.94	5,000	(307)
GlaxoSmithKline PLC	Call	UBS AG	4/14/16	GBP	14.17	710	(168)
Actelion Ltd.		Morgan Stanley & Co. International					
	Call	PLC	4/19/16	CHF	141.80	2,400	(13,900)
Chugai Pharmaceutical Co. Ltd.	Call	UBS AG	4/20/16	JPY	3,435.37	8,300	(9,502)
Boston Scientific Corp.	Call	Deutsche Bank AG	4/21/16	USD	17.85	73,500	(80,415)
Boston Scientific Corp.		Morgan Stanley & Co. International					
	Call	PLC	4/25/16	USD	18.35	58,600	(45,576)
AstraZeneca PLC	Call	Credit Suisse International	4/26/16	GBP	42.67	5,500	(244)
Baxalta, Inc.	Call	Goldman Sachs International	4/27/16	USD	40.57	8,400	(8,713)
Universal Health Services, Inc., Class B		Morgan Stanley & Co. International					
	Call	PLC	4/29/16	USD	119.67	4,200	(33,755)
Roche Holding AG	Call	UBS AG	5/03/16	CHF	258.25	4,000	(1,228)
Teva Pharmaceutical Industries Ltd. ADR	Call	Barclays Bank PLC	5/03/16	USD	58.27	9,000	(3,709)
Boston Scientific Corp.	Call	Goldman Sachs International	5/04/16	USD	18.02	60,000	(63,178)
GlaxoSmithKline PLC	Call	Goldman Sachs International	5/04/16	GBP	14.19	17,500	(7,045)
Baxter International, Inc.		Morgan Stanley & Co. International					
	Call	PLC	5/09/16	USD	41.18	11,300	(11,485)
Johnson & Johnson	Call	Citibank N.A.	5/09/16	USD	109.19	3,100	(4,863)
AstraZeneca PLC	Call	Credit Suisse International	5/10/16	GBP	41.35	5,000	(2,025)
GlaxoSmithKline PLC	Call	Goldman Sachs International	5/18/16	GBP	14.19	17,500	(6,488)
Total							\$ (293,666)

Fair Value Hierarchy as of Period End

Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a fair value 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. The significant unobservable inputs used by the Global Valuation Committee in determining the price for Fair Valued Investments are typically categorized as Level 3.

Changes in valuation techniques may result in transfers into or out of an assigned level within the hierarchy. In accordance with the Trust spolicy, transfers between different levels of the fair value 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 investments and derivative financial instruments and is not necessarily an indication of the risks associated with investing in those securities. 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.

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BlackRock Health Sciences Trust (BME)

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	\$ 56,608,355	\$ 2,085,014	\$ 1,424,869	\$ 60,118,238
Electronic Equipment, Instruments & Components	1,673,388			1,673,388
Health Care Equipment & Supplies	53,730,059			53,730,059
Health Care Providers & Services	58,644,259			58,644,259
Health Care Technology	1,313,408			1,313,408
Life Sciences Tools & Services	4,862,453			4,862,453
Pharmaceuticals	61,522,155	12,042,405		73,564,560
Preferred Stocks ¹			1,218,254	1,218,254
Rights ¹			68,517	68,517
Short-Term Securities	13,168,573			13,168,573
Total	¢ 251 522 650	¢ 14 127 410	¢ 2.711.640	¢ 269 261 700
Total	\$ 251,522,650	\$ 14,127,419	\$ 2,711,640	\$ 268,361,709

¹ See above Schedule of Investments for values in each industry.

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments ²				
Liabilities:				
Equity contracts	\$ (1,838,177)	\$ (438,597)		\$ (2,276,774)

 $^{^{2}\,}$ Derivative financial instruments are options written, which are shown at value.

The Trust may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of period end, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	I	Level 1	I	Level 2	Level 3	Total
Assets: Foreign currency at value Liabilities: Bank overdraft	\$	167,145	\$	(143,443)		\$ 167,145 (143,443)
Total	\$	167,145	\$	(143,443)		\$ 23,702

During the period ended March 31, 2016, there were no transfers between levels.

A reconciliation of Level 3 investments is presented when the Trust had a significant amount of Level 3 investments at the beginning and/or end of the period in relation to net assets. The following table is a reconciliation of Level 3 investments for which significant unobservable inputs were used in determining fair value:

	Common Stocks	Preferred Stocks	Rights	Total
Assets:				
Opening Balance, as of December 31, 2015		\$ 5,907,930		\$ 5,907,930
Transfers into Level 3	\$ 986,402		\$ 25,848	1,012,250
Transfers out of Level 3		(2,546,851)		(2,546,851)

Accrued discounts/premiums Net realized gain Net change in unrealized appreciation/depreciation	438,467	1,287,939 (937,224)	42,669	1,287,939 (456,088)
Purchases Sales		(2,493,540)		(2,493,540)
Closing Balance, as of March 31, 2016	\$ 1,424,869	\$ 1,218,254	\$ 68,517	\$ 2,711,640
Net change in unrealized appreciation/depreciation on investments still held at March 31, 2016	\$ 438,467	\$ (937,224)	\$ 42,669	\$ (456,088)

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BlackRock Health Sciences Trust (BME)

The following table summarizes the valuation techniques used and unobservable inputs utilized by the BlackRock Global Valuation Methodologies Committee (the Global Valuation Committee) to determine the value of certain of the Trust s Level 3 investments as of period end.

			Unobservable	Range of	
	Value	Valuation Techniques	Inputs	Unobservable Inputs Utilized	
Assets:					
Common Stocks	\$ 1,424,869	Discounted Cash Flow	Discount Rate 1	1.74%	
			Time to Exit1	1-3 years	
Preferred Stocks	1,218,254	Cost ²	N/A	•	
Rights	68,517	Acquisition Terms	Intrinsic Value ³		
Total	\$ 2,711,640				

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Decrease in unobservable input may result in a significant increase to value, while an increase in the unobservable input may result in a significant decrease to value.

² The Trust fair values certain of its Level 3 investments using acquisition cost, although the transaction may not have occurred during the current reporting period. These investments are generally privately held investments. There may not be a secondary market, and/or there are a limited number of investors. The determination to fair value such investments at cost is based upon factors consistent with the principles of fair value measurement that are reasonably available to the Global Valuation Committee, or its delegate. Valuations are reviewed utilizing available market information to determine if the carrying value should be adjusted. Such market data may include, but is not limited to, observations of the trading multiples of public companies considered comparable to the private companies being valued, financial or operational information released by the company, and/or news or corporate events that affect the investment. Valuations may be adjusted to account for company-specific issues, the lack of liquidity inherent in a nonpublic investment and the fact that comparable public companies are not identical to the investments being fair valued by the Trust.

³ Increase in unobservable input may result in a significant increase to value, while a decrease in the unobservable input may result in a significant decrease to value.

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 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 23, 2016

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 23, 2016

By: /s/ Neal J. Andrews

Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock Health Sciences Trust

Date: May 23, 2016