BlackRock Health Sciences Trust Form N-Q September 25, 2012

#### **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: 10/31/2012

Date of reporting period: 07/31/2012

Item 1 Schedule of Investments

# Schedule of Investments July 31, 2012 (Unaudited)

## BlackRock Health Sciences Trust (BME)

Common Stocks	Shares	Value
Biotechnology 30.4%		
3SBio, Inc ADR (a)	41,031	\$ 454,623
Achillion Pharmaceuticals, Inc. (a)	23,385	154,809
Acorda Therapeutics, Inc. (a)(b)(c)	67,900	1,634,353
Actelion Ltd.	20,508	937,911
Alexion Pharmaceuticals, Inc. (a)(b)	72,300	7,580,655
Alnylam Pharmaceuticals, Inc. (a)(b)	25,336	473,530
Amgen, Inc. (b)	119,700	9,887,220
Amylin Pharmaceuticals, Inc. (a)	29,500	908,305
Arena Pharmaceuticals, Inc. (a)(b)(c)	57,200	478,192
Ariad Pharmaceuticals, Inc. (a)(b)	137,478	2,629,954
Arqule, Inc. (a)(b)(c)	36,800	222,640
Biogen Idec, Inc. (a)(b)	54,680	7,973,984
BioMarin Pharmaceutical, Inc. (a)(b)	28,200	1,107,978
Celgene Corp. (a)(b)	93,800	6,421,548
ChemoCentryx, Inc. (a)	17,053	247,098
CSL Ltd.	17,800	796,029
Cubist Pharmaceuticals, Inc. (a)(b)(c)	42,000	1,808,520
Exelixis, Inc. (a)(b)	146,300	914,375
Genmab A/S (a)	15,683	160,907
Genomic Health, Inc. (a)(b)	15,400	516,978
Gilead Sciences, Inc. (a)(b)	54,566	2,964,571
Halozyme Therapeutics, Inc. (a)(b)	40,504	365,346
Incyte Corp. Ltd. (a)(b)(c)	99,900	2,496,501
Medivation, Inc. (a)(b)(c)	32,100	3,200,370
Momenta Pharmaceuticals, Inc. (a)(b)(c)	29,300	416,646
Onyx Pharmaceuticals, Inc. (a)(b)	26,090	1,955,967
Pharmacyclics, Inc. (a)(b)	53,542	2,848,970
Protalix BioTherapeutics, Inc. (a)	113,170	658,649
Seattle Genetics, Inc. (a)(b)	25,000	654,000
Synta Pharmaceuticals Corp. (a)(b)	38,900	285,915
Verastem, Inc. (a)	16,500	154,110
Vertex Pharmaceuticals, Inc. (a)(b)	64,505	3,129,138
		64,439,792
		04,439,792
Diversified Consumer Services 0.6%		
Service Corp. International	41,400	531,990
Stewart Enterprises, Inc., Class A	94,200	643,386
		1,175,376
Food & Staples Retailing 1.7%		
Brazil Pharma SA	104,000	621,706
CVS Caremark Corp. (b)	66,300	3,000,075
evs Calcinaix Corp. (b)	00,300	3,000,073
		2 /21 70:
W 14 C 7 4 0 C 14 42 M		3,621,781
Health Care Equipment & Supplies 13.7%	71.474	2 520 125
Align Technology, Inc. (a)(b)(c)	74,474	2,529,137
ArthroCare Corp. (a)	22,680	670,875
Baxter International, Inc. (b)	28,300	1,655,833
The Cooper Cos., Inc. (b)	32,400	2,438,424
Coviden Plc	40,000	2,235,200
Cyberonics, Inc. (a)(b)	26,371	1,141,864

DENTSPLY International, Inc. Edwards Lifesciences Corp. (a)(b)(c)	29,200 24,200	1,061,128 2,449,040
Common Stocks	Shares	Value
Health Care Equipment & Supplies (concluded) Given Imaging Ltd. (b)	21,700	\$ 304,885
HeartWare International, Inc. (a)(b)	11,500	1,026,835
Intuitive Surgical, Inc. (a)(b)	4,930	2,373,795
Medtronic, Inc. (b)	28,200	1,111,644
ResMed, Inc. (a)(b)	54,400	1,716,864
Sirona Dental Systems, Inc. (a)(b)	16,400	708,972
Stryker Corp. (b)	49,900	2,596,297
Thoratec Corp. (a)(b)	31,700 66,600	1,087,627
Zimmer Holdings, Inc. (b)	00,000	3,924,738
Harlib Care Develope 9 Sandara 1/ 40/		29,033,158
Health Care Providers & Services 16.4% Aetna, Inc.	41,011	1,478,857
AMERIGROUP Corp. (a)	8,300	746,004
AmerisourceBergen Corp. (b)	26,800	1,063,960
Brookdale Senior Living, Inc. (a)(b)	65,000	1,069,900
Capital Senior Living Corp. (a)	47,200	530,528
Cardinal Health, Inc. (b)	63,700	2,744,833
Catamaran Corp. (a)(b)	32,700	2,763,477
CIGNA Corp. (b)	24,700	994,916
Express Scripts Holding Co. (a)(b) HCA Holdings, Inc. (b)	100,576 42,100	5,827,373 1,114,808
Henry Schein, Inc. (a)(b)(c)	16,500	1,234,365
Humana, Inc. (b)	7,143	440,009
McKesson Corp. (b)	43,200	3,919,536
Quest Diagnostics, Inc. (b)	31,149	1,820,036
Team Health Holdings, Inc. (a)	37,085	990,170
UnitedHealth Group, Inc. (b)	77,834	3,976,539
Universal Health Services, Inc., Class B (b)	26,600	1,039,528
VCA Antech, Inc. (a)(b)(c)	82,642	1,504,084
WellPoint, Inc. (b)	28,800	1,534,752
		34,793,675
Health Care Technology 0.7% Cerner Corp. (a)(b)(c)	20,300	1,500,576
Industrial Conglomerates 0.6% Koninklijke Philips Electronics NV	57,833	1,271,882
Life Sciences Tools & Services 3.1%	21,422	-,-,-,-
ICON Plc - ADR (a)	54,700	1,319,911
Life Technologies Corp. (a)(b)	25,300	1,110,164
Luminex Corp. (a)	27,800	476,214
Mettler-Toledo International, Inc. (a)(c)	3,800	588,240
Thermo Fisher Scientific, Inc. (b)	33,400	1,859,378
Waters Corp. (a)(b)	14,215	1,101,378 6,455,285
Pharmaceuticals 29.0%	20.722	5.040.005
Abbott Laboratories (b)	89,700 54,200	5,948,007
Allergan, Inc. (b) Bayer AG	54,200 14,100	4,448,194 1,070,936
Elan Corp. Plc - ADR (a)(b)	69,900	807,345
Eli Lilly & Co. (b)	49,800	2,192,694

#### **Portfolio Abbreviations**

To simplify the listings of portfolio holdings in the Schedule of Investments, the names and descriptions of many securities have been abbreviated according to the following list:

ADR American Depositary Receipt DKK
AUD Australian Dollar EUR
CHF Swiss Franc USD

JULY 31, 2012

Danish Krone

US Dollar

Euro

# Schedule of Investments (continued)

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

Common Stocks	Shares	Value
Pharmaceuticals (concluded)	24.700	¢ 1.021.621
Endo Health Solutions, Inc. (a)(b)	34,700	\$ 1,031,631
Forest Laboratories, Inc. (a)(b)	29,900	1,003,145
Hospira, Inc. (a)(b)(c) Johnson & Johnson (b)	31,100 101,970	1,080,725 7,058,363
Merck & Co., Inc. (b)	132,500	5,852,525
Merck KGaA	16,600	1,669,521
Nektar Therapeutics (a)(b)	91,400	778,728
Novartis AG	21,700	1,274,203
Perrigo Co. (b)	15,700	1,790,114
Pfizer, Inc. (b)	299,000	7,187,960
Roche Holding AG	31,300	5,542,467
Sanofi SA	71,000	5,792,742
Teva Pharmaceutical Industries	. ,,,,,,	-,,-
Ltd ADR (b)	41,700	1,705,113
UCB SA	23,800	1,190,659
Valeant Pharmaceuticals International, Inc. (a)(b)	25,400	1,208,024
Vivus, Inc. (a)(b)	36,345	764,335
Watson Pharmaceuticals, Inc. (a)(b)	26,900	2,093,627
		61,491,058
Total Long-Term Investments		
(Cost \$177,277,618) 96.2%		203,782,583
Shout Town Cognities		
Short-Term Securities BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)	13,609,366 Beneficial Interest (000)	13,609,366
	Beneficial Interest	13,609,366
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)	Beneficial Interest	13,609,366 6,319,645
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series,	Beneficial Interest (000)	
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%	Beneficial Interest (000)	
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities	Beneficial Interest (000)	6,319,645
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%	Beneficial Interest (000)	6,319,645
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written	Beneficial Interest (000)	6,319,645 19,929,011
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$ 19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$ 197,206,629*) 105.6%  Options Written	Beneficial Interest (000)	6,319,645 19,929,011
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$ 19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$ 197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%	Beneficial Interest (000) \$ 6,320	6,319,645 19,929,011 223,711,594
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$ 19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$ 197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12	Beneficial Interest (000) \$ 6,320  Contracts	6,319,645 19,929,011 223,711,594 (25,449)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12	Reneficial   Interest (000)   \$ 6,320	6,319,645 19,929,011 223,711,594 (25,449) (8,438)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12  Align Technology, Inc., Strike Price USD 35, Expires 9/24/12	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220 245	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800) (45,325)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12  Align Technology, Inc., Strike Price USD 35, Expires 9/24/12  Allergan, Inc., Strike Price USD 95, Expires 8/10/12	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220 245 165	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800) (45,325) (452)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12  Align Technology, Inc., Strike Price USD 35, Expires 9/24/12  Allergan, Inc., Strike Price USD 95, Expires 8/10/12  Alnylam Pharmaceuticals, Inc., Strike Price USD 20, Expires 9/24/12	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220 245	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800) (45,325)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12  Allergan, Inc., Strike Price USD 95, Expires 8/10/12  Alnylam Pharmaceuticals, Inc., Strike Price USD 20, Expires 9/24/12  Alnylam Pharmaceuticals, Inc., Strike Price USD 20, Expires 9/24/12  AmerisourceBergen Corp.:	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220 245 165 80	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800) (45,325) (452) (7,400)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$ 19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$ 197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12  Align Technology, Inc., Strike Price USD 35, Expires 9/24/12  Allergan, Inc., Strike Price USD 95, Expires 8/10/12  Alnylam Pharmaceuticals, Inc., Strike Price USD 20, Expires 9/24/12  AmerisourceBergen Corp.:  Strike Price USD 39, Expires 8/20/12	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220 245 165	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800) (45,325) (452) (7,400) (5,625)
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f)  BlackRock Liquidity Series, LLC Money Market Series, 0.30% (d)(e)(f)  Total Short-Term Securities  (Cost \$19,929,011) 9.4%  Total Investments Before Outstanding Options Written  (Cost \$197,206,629*) 105.6%  Options Written  Exchange-Traded Call Options (1.1)%  Abbott Laboratories, Strike Price USD 65.70, Expires 8/18/12  Acorda Therapeutics, Inc., Strike Price USD 26, Expires 8/20/12  Alexion Pharmaceuticals, Inc., Strike Price USD 100, Expires 8/20/12  Allergan, Inc., Strike Price USD 95, Expires 8/10/12  Alnylam Pharmaceuticals, Inc., Strike Price USD 20, Expires 9/24/12  Alnylam Pharmaceuticals, Inc., Strike Price USD 20, Expires 9/24/12  AmerisourceBergen Corp.:	Eneficial Interest (000) \$ 6,320  Contracts  210 225 220 245 165 80 50	6,319,645 19,929,011 223,711,594 (25,449) (8,438) (140,800) (45,325) (452) (7,400)

Strike Price USD 70, Expires 8/08/12	340	(428,400)
Strike Price USD 82.50, Expires 9/24/12	60	(15,270)
Options Written Exchange-Traded Call Options (continued)	Contracts	Value
Arena Pharmaceuticals, Inc., Strike Price USD 14, Expires 8/20/12	190	\$ (665)
Ariad Pharmaceuticals, Inc., Strike Price USD 20, Expires 8/20/12	450	(19,125)
Arqule, Inc., Strike Price USD 6, Expires 9/27/12	120	(5,445)
Baxter International, Inc.:	120	(0,1.0)
Strike Price USD 50, Expires 8/20/12	45	(38,588)
Strike Price USD 57.50, Expires 11/19/12	90	(26,235)
Bayer AG, Strike Price EUR 62, Expires 8/17/12	75	(12,459)
Biogen Idec, Inc.:		
Strike Price USD 145, Expires 8/20/12	110	(36,850)
Strike Price USD 145, Expires 9/24/12	70	(40,950)
BioMarin Pharmaceutical, Inc., Strike Price USD 40, Expires 9/24/12	100	(28,750)
Brookdale Senior Living, Inc., Strike Price USD 17.50, Expires 8/20/12	215	(5,913)
Cardinal Health, Inc.:		
Strike Price USD 42.10, Expires 8/08/12	135	(15,295)
Strike Price USD 43, Expires 8/20/12	90	(9,900)
Catamaran Corp.:	10	(400)
Strike Price USD 105, Expires 8/20/12	10	(400)
Strike Price USD 92.50, Expires 8/20/12 Strike Price USD 95, Expires 8/20/12	45 45	(4,275) (2,812)
Strike Price USD 95, Expires 8/20/12 Celgene Corp.:	43	(2,012)
Strike Price USD 62.50, Expires 8/20/12	40	(24,900)
Strike Price USD 67.50, Expires 8/20/12	105	(22,785)
Strike Price USD 70, Expires 8/20/12	110	(10,010)
Strike Price USD 72.50, Expires 9/24/12	55	(5,940)
Cerner Corp., Strike Price USD 80, Expires 9/24/12	106	(11,395)
CIGNA Corp., Strike Price USD 43, Expires 9/24/12	80	(7,400)
The Cooper Cos., Inc., Strike Price USD 85, Expires 8/20/12	85	(2,125)
Cubist Pharmaceuticals, Inc., Strike Price USD 42, Expires 9/24/12	135	(31,725)
CVS Caremark Corp.:		
Strike Price USD 46, Expires 8/20/12	165	(10,973)
Strike Price USD 48, Expires 8/20/12	60	(990)
Strike Price USD 49, Expires 8/20/12	210	(1,575)
Cyberonics, Inc., Strike Price USD 45, Expires 9/24/12	85	(14,662)
Edwards Lifesciences Corp.:	20	(2.025)
Strike Price USD 105, Expires 8/20/12	30	(2,925)
Strike Price USD 110, Expires 11/19/12	55	(18,700)
Eli Lilly & Co.: Strike Price USD 43, Expires 8/20/12	30	(4,140)
Strike Price USD 44, Expires 9/24/12	185	(29,508)
Endo Health Solutions, Inc., Strike Price USD 30, Expires 8/20/12	100	(7,500)
Exelixis, Inc.:	100	(7,300)
Strike Price USD 6, Expires 8/20/12	300	(14,250)
Strike Price USD 6, Expires 9/24/12	190	(11,875)
T		( ,)

JULY 31, 2012

# Schedule of Investments (continued)

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

Options Written	Contracts	Value
Exchange-Traded Call Options (continued)		
Express Scripts Holding Co.:		
Strike Price USD 55, Expires 8/20/12	215	\$ (75,250)
Strike Price USD 60, Expires 11/19/12	137	(32,948)
Forest Laboratories, Inc., Strike Price USD 36, Expires 8/20/12	99	(2,722)
Genomic Health, Inc., Strike Price USD 35, Expires 9/24/12	50	(7,250)
Gilead Sciences, Inc., Strike Price USD 55, Expires 8/20/12	165	(13,943)
Given Imaging Ltd., Strike Price USD 17.50, Expires 11/19/12	75	(4,312)
Halozyme Therapeutics, Inc., Strike Price USD 10, Expires 9/24/12	200	(13,500)
HCA Holdings, Inc.:	55	(600)
Strike Price USD 30, Expires 8/20/12	55	(688)
Strike Price USD 28, Expires 9/24/12	70	(6,125)
Heart Ware International, Inc., Strike Price USD 90, Expires 8/20/12	35 50	(8,925)
Henry Schein, Inc., Strike Price USD 80, Expires 8/20/12 Hospira, Inc., Strike Price USD 36.25, Expires 9/18/12	100	(4,000)
Humana, Inc., Strike Price USD 30.23, Expires 9/10/12  Humana, Inc., Strike Price USD 80, Expires 8/20/12	20	(14,485) (100)
Incyte Corp. Ltd., Strike Price USD 30, Expires 8/20/12	75	(1,312)
Intuitive Surgical, Inc., Strike Price USD 490, Expires 8/20/12	15	(12,450)
Johnson & Johnson:	13	(12,430)
Strike Price USD 66.75, Expires 8/07/12	195	(48,165)
Strike Price USD 70, Expires 9/24/12	145	(9,860)
Life Technologies Corp., Strike Price USD 45, Expires 8/20/12	80	(10,200)
McKesson Corp., Strike Price USD 90, Expires 8/20/12	135	(24,975)
Medivation, Inc., Strike Price USD 85, Expires 8/20/12	110	(168,300)
Medtronic, Inc., Strike Price USD 38, Expires 8/20/12	180	(29,430)
Merck & Co., Inc.:	100	(2), (30)
Strike Price USD 43, Expires 8/20/12	145	(20,445)
Strike Price USD 44, Expires 9/24/12	50	(5,525)
Momenta Pharmaceuticals, Inc., Strike Price USD 15, Expires 9/24/12	97	(6,790)
Nektar Therapeutics, Strike Price USD 10, Expires 9/24/12	250	(7,500)
Novartis AG, Strike Price CHF 56, Expires 8/17/12	75	(11,828)
Onyx Pharmaceuticals, Inc.:		. , ,
Strike Price USD 70, Expires 8/20/12	35	(21,175)
Strike Price USD 80, Expires 9/24/12	50	(18,000)
Perrigo Co., Strike Price USD 115, Expires 8/20/12	45	(10,125)
Pfizer, Inc., Strike Price USD 22.85, Expires 8/18/12	345	(41,804)
Pharmacyclics, Inc.:		
Strike Price USD 42, Expires 8/20/12	180	(207,900)
Strike Price USD 55, Expires 8/20/12	9	(1,912)
Strike Price USD 60, Expires 8/20/12	18	(1,440)
Quest Diagnostics, Inc., Strike Price USD 60, Expires 8/20/12	100	(5,000)
ResMed, Inc.:		
Strike Price USD 35, Expires 8/20/12	50	(2,000)
Strike Price USD 32, Expires 9/27/12	130	(22,516)
Options Written	Contracts	Value
Exchange-Traded Call Options (concluded)		
Seattle Genetics, Inc., Strike Price USD 30, Expires 8/20/12	75	\$ (2,062)
Sirona Dental Systems, Inc., Strike Price USD 45, Expires 8/20/12	49	(4,042)
Stryker Corp.:		
Strike Price USD 55, Expires 8/20/12	50	(375)
Strike Price USD 52.50, Expires 9/24/12	115	(15,525)
Synta Pharmaceuticals Corp., Strike Price USD 7.50, Expires 9/24/12	200	(18,500)
Teva Pharmaceutical Industries Ltd ADR:	100	(10.050)
Strike Price USD 40, Expires 8/20/12	100	(12,950)
Strike Price USD 42.50, Expires 8/20/12	30	(885)
Thermo Fisher Scientific, Inc.:	20	(4.405)
Strike Price USD 55, Expires 8/20/12	30	(4,425)

Strike Price USD 55, Expires 9/24/12	80	(17,400)
Thoratec Corp.:		
Strike Price USD 36, Expires 8/20/12	50	(4,375)
Strike Price USD 37, Expires 8/20/12	50	(3,125)
UCB SA, Strike Price EUR 41, Expires 8/17/12	75	(6,645)
UnitedHealth Group, Inc.:		
Strike Price USD 55, Expires 9/24/12	160	(9,360)
Strike Price USD 57.50, Expires 9/24/12	150	(3,450)
Universal Health Services, Inc., Class B:		
Strike Price USD 40, Expires 8/20/12	20	(1,200)
Strike Price USD 40, Expires 9/24/12	60	(7,800)
Valeant Pharmaceuticals International, Inc., Strike Price USD 50, Expires 9/24/12	80	(21,600)
VCA Antech, Inc.:		
Strike Price USD 22.50, Expires 8/20/12	135	(1,350)
Strike Price USD 22.50, Expires 9/24/12	135	(1,350)
Vertex Pharmaceuticals, Inc.:		
Strike Price USD 70, Expires 8/20/12	30	(300)
Strike Price USD 55, Expires 9/24/12	200	(25,500)
Vivus, Inc., Strike Price USD 34, Expires 8/20/12	125	(375)
Waters Corp., Strike Price USD 85, Expires 8/20/12	44	(660)
Watson Pharmaceuticals, Inc., Strike Price USD 75, Expires 9/24/12	90	(40,500)
WellPoint, Inc., Strike Price USD 62.50, Expires 9/24/12	115	(2,242)
Zimmer Holdings, Inc.:		
Strike Price USD 60.50, Expires 8/07/12	90	(2,190)
Strike Price USD 65, Expires 8/20/12	130	(975)
Total Exchange-Traded Call Options		(2,242,460)
Exchange-Traded Put Options (0.0)%		
Elan Corp. Plc - ADR, Strike Price USD 11, Expires 8/20/12	180	(14,400)
Over-the-Counter Call Options (0.3)%		
Abbott Laboratories, Strike Price USD 66.02, Expires 8/23/12, Broker Morgan Stanley & Co., Inc.	3,300	(3,764)
	2,200	(5,701)

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# Schedule of Investments (continued)

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

Options Written	Contracts	Value
Over-the-Counter Call Options (continued)		
Actelion Ltd.:		+
Strike Price CHF 40.47, Expires 8/13/12, Broker Deutsche Bank Securities Corp.	4,300	\$ (18,404)
Strike Price CHF 44.24, Expires 9/12/12, Broker UBS Securities LLC	2,500	(5,452)
Capital Senior Living Corp., Strike Price USD 11.87, Expires 9/28/12, Broker Banc of America Securities	15,600	(2,667)
Covidien Plc, Strike Price USD 53.62, Expires 8/09/12, Broker Goldman Sachs & Co.	20,000	(45,200)
CSL Ltd., Strike Price AUD 39.35, Expires 8/13/12, Broker Citigroup Global Markets, Inc.	5,300	(18,068)
DENTSPLY International, Inc., Strike Price USD 38.33, Expires 8/07/12, Broker Banc of America Securities	6,000	(242)
Elan Corp. Plc - ADR, Strike Price USD 16, Expires 8/13/12, Broker Banc of America Securities	21,500	(2)
ICON Plc - ADR, Strike Price USD 23.63, Expires 9/10/12, Broker Banc of America Securities	18,000	(21,534)
Incyte Corp. Ltd., Strike Price USD 24.98,	27.700	(10.055)
Expires 8/08/12, Broker Deutsche Bank Securities Corp.	25,500	(19,357)
Koninklijke Philips Electronics NV, Strike Price EUR 15.05, Expires 8/13/12, Broker UBS Securities LLC Merck & Co., Inc.:	19,000	(66,525)
Strike Price USD 37.72, Expires 8/06/12, Broker Morgan Stanley & Co., Inc.	13,500	(87,043)
Strike Price USD 37.72, Expires 8/10/12, Broker Morgan Stanley & Co., Inc.	13,500	(87,043)
	5,500	` ' '
Merck KGaA, Strike Price EUR 79.34, Expires 9/12/12, Broker UBS Securities LLC Pfizer. Inc.:	5,300	(25,705)
Strike Price USD 21.93, Expires 8/07/12, Broker Deutsche Bank Securities Corp.	16,500	(34,749)
Strike Price USD 23.68, Expires 9/07/12, Broker Morgan Stanley & Co., Inc.	53,000	(37,576)
Options Written	Contracts	Value
Over-the-Counter Call Options (concluded)	0 0	
Roche Holding AG:		
Strike Price CHF 162.97, Expires 8/13/12, Broker Banc of America Securities	4,200	\$ (42,674)
Strike Price CHF 170.49, Expires 9/12/12, Broker Citigroup Global Markets, Inc.	6,100	(27,678)
Sanofi SA:		
Strike Price EUR 58.13, Expires 8/13/12, Broker Citigroup Global Markets, Inc.	18,000	(181,243)
Strike Price EUR 62.57, Expires 9/12/12, Broker Morgan Stanley & Co., Inc.	5,500	(27,536)
Service Corp. International, Strike Price USD 13.07, Expires 9/06/12, Broker UBS Securities LLC	13,500	(4,217)
Stewart Enterprises, Inc., Class A, Strike Price USD 7.14, Expires 8/03/12, Broker Goldman Sachs &		
Co.	31,000	(133)
Total Over-the-Counter Call Options		(756,812)
Total Options Written		
Zomi Opilono III.		
(Premiums Received \$1,900,472) (1.4)%		(3,013,672)
Total Investments Not of Outstanding		
Total Investments Net of Outstanding		220 607 022
Options Written 104.2%		220,697,922
Liabilities in Excess of Other Assets (4.2)%		(8,918,246)
Net Assets 100.0%		\$ 211,779,676
Net Assets 100.076		\$ 211,779,676

<sup>\*</sup> As of July 31, 2012, gross unrealized appreciation and gross unrealized depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 199,869,838
Gross unrealized appreciation Gross unrealized depreciation	\$ 27,563,150 (3,721,394)

Net unrealized appreciation \$ 23,841,756

- (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) Security, or a portion of security, is on loan.
- (d) Represents the current yield as of report date.
- (e) Security was purchased with the cash collateral from loaned securities.

(f) Investments in companies considered to be an affiliate of the Trust during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

			Shares/		
			Beneficial		
	Shares/ Beneficial Interest		Interest		
	Held at		Held at		
	October 31,	Net	July 31,		
				Realized	
Affiliate	2011	Activity	2012	Gain	Income
BlackRock Liquidity Funds, TempFund, Institutional Class	7,801,065	5,808,301	13,609,366	\$178	\$12,069
BlackRock Liquidity Series, LLC Money Market Series	\$7,320,205	\$(1,000,560)	\$6,319,645		\$14,570

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# Schedule of Investments (concluded)

BlackRock Health Sciences Trust (BME)

Foreign currency exchange contracts as of July 31, 2012 were as follows:

#### Currency

Purchased	Currency Sold	Counterparty	Settlement Date	Unrealized Appreciation
DKK 49,000 DKK 18,000	USD 8,072 USD 2,963	Citigroup Global Markets, Inc. Citigroup Global Markets, Inc.	8/01/12 8/02/12	\$ 30 13
Total				\$ 43

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 Trust management. These definitions may not apply for purposes of this report, which may combine industry sub-classifications for reporting ease.

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 and liabilities

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 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 and other significant accounting policies, please refer to the Trust s most recent financial statements as contained in its semi-annual report.

The following tables summarize the Trust s investments and derivative financial instruments categorized in the disclosure hierarchy as of July 31, 2012:

Level 1 Level 2 Level 3 Total

Assets:

Investments:

Long-Term Investments:

Common Stocks:			
Biotechnology	\$ 63,482,856	\$ 956,936	\$ 64,439,792
Diversified Consumer Services	1,175,376		1,175,376
Food & Staples Retailing	3,621,781		3,621,781
Health Care Equipment & Supplies	29,033,158		29,033,158
Health Care Providers & Services	34,793,675		34,793,675
Health Care Technology	1,500,576		1,500,576
Industrial Conglomerates		1,271,882	1,271,882
Life Sciences Tools & Services	6,455,285		6,455,285
Pharmaceuticals	44,950,530	16,540,528	61,491,058
Short-Term Securities	13,609,366	6,319,645	19,929,011
Total	\$ 198,622,603	\$ 25,088,991	\$ 223,711,594

	Level 1	Level 2	Level 3	Total	
Derivative Financial Instruments <sup>1</sup> Assets:					
Foreign currency exchange contracts  Liabilities:	\$ 43			\$ 4	3
Equity contracts	(1,621,729)	\$ (1,391,943)		(3,013,67	2)
Total	\$ (1,621,686)	\$ (1,391,943)		\$ (3,013,62	9)

Derivative financial instruments are foreign currency exchange contracts and options. Foreign currency exchange contracts are valued at the unrealized appreciation/depreciation on the instrument and options are shown at value.

Certain of the Trust s assets and liabilities are held at carrying amount, which approximates fair value for financial reporting purposes. As of July 31, 2012, such assets and liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged as collateral for options written	\$ 207,901			\$ 207,901
Foreign currency	2,852			2,852
Liabilities:				
Collateral on securities loaned at value		\$ (6,319,645)		(6,319,645)
Total	\$ 210,753	\$ (6,319,645)		\$ (6,108,892)
There were no transfers between levels during the period ended July 31, 2012				

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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 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: September 25, 2012

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: September 25, 2012

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

Date: September 25, 2012