

H&Q LIFE SCIENCES INVESTORS
Form N-Q
February 29, 2008

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

OMB APPROVAL
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FORM N-Q

**QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED
MANAGEMENT INVESTMENT COMPANY**

Investment Company Act file number 811-06565

H&Q Life Sciences Investors
(Exact name of registrant as specified in charter)

30 Rowes Wharf, Boston, MA
(Address of principal executive offices)

02110
(Zip code)

(Name and address of agent for service)

Registrant's telephone number, including area code: 617-772-8500

Date of fiscal year end: September 30

Date of reporting period: 12/31/07

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-% (ss.ss. 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b-15 under the Investment Company Act of 1940 (17CFR 270.3b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget (OMB) control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss.3507.

Item 1. Schedule of Investments.

H&Q LIFE SCIENCES INVESTORS

SCHEDULE OF INVESTMENTS

DECEMBER 31, 2007

(Unaudited)

CONVERTIBLE SECURITIES AND WARRANTS 13.2% of Net Assets

SHARES		VALUE
	Convertible Preferred (Restricted)(c) 12.9%	
	<i>Drug Discovery Technologies 1.0%</i>	
1,587,302	Agilix Corporation Series B (a) (b)	\$ 94,540
250,000	Ceres, Inc. Series C (a)	1,625,000
21,462	Ceres, Inc. Series C-1 (a)	139,503
175,540	Ceres, Inc. Series D (a)	1,141,010
28,385	Ceres, Inc. Series F (a)	184,502
5,677	Ceres, Inc. warrants (expiration 9/05/15) (a)	0
200,000	Zyomyx, Inc. Series A New (a)	20,000
200	Zyomyx, Inc. Series B New (a)	20
	<i>Emerging Biopharmaceuticals 4.2%</i>	
744,921	Agensys, Inc. Series C (a)	6,777,291
138,261	Agensys, Inc. Series D (a)	1,257,899
1,212,121	Raven biotechnologies, Inc. Series B (a)	251,515
1,872,772	Raven biotechnologies, Inc. Series C (a)	388,600
2,722,014	Raven biotechnologies, Inc. Series D (a)	200,068
1,415,385	TargeGen, Inc. Series C (a)	1,226,672
407,825	TargeGen, Inc. Series D (a)	353,450
2,649,902	Xanthus Pharmaceuticals, Inc. Series B (a)	2,649,902
	<i>Healthcare Services 2.6%</i>	
635	CardioNet, Inc. Mandatorily Cvt. Pfd. (a)	661,577
1,051,429	CardioNet, Inc. Series C (a)	3,680,001
35,254	CardioNet, Inc. warrants (expiration 5/01/11) (a)	0
1,390	CardioNet, Inc. warrants (expiration 8/29/11) (a)	0
322,168	CytoLogix Corporation Series A (a) (b)	3,222
151,420	CytoLogix Corporation Series B (a) (b)	475,459
3,589,744	PHT Corporation Series D (a) (b)	2,800,000
802,996	PHT Corporation Series E (a) (b)	626,337
	<i>Medical Devices and Diagnostics 5.1%</i>	
3,235,293	Concentric Medical, Inc. Series B (a) (b)	4,529,410
1,162,790	Concentric Medical, Inc. Series C (a) (b)	1,627,906
455,333	Concentric Medical, Inc. Series D (a) (b)	637,466
177,778	EPR, Inc. Series A (a)	1,778
1,592,852	FlowCardia, Inc. Series C (a)	1,708,334
2,446,016	Labcyte Inc. Series C (a)	1,280,000
2,050,000	Magellan Biosciences, Inc. Series A (a)	2,050,000
1,031,992	OmniSonics Medical Technologies, Inc. Series A-1 (a)	781,218
877,747	OmniSonics Medical Technologies, Inc. Series B-1 (a)	664,454
43,478	TherOx, Inc. Series H (a)	167,869
99,646	TherOx, Inc. Series I (a)	384,733
2,813	TherOx, Inc. warrants (expiration 1/26/10) (a)	0
5,427	TherOx, Inc. warrants (expiration 6/09/09) (a)	0
640,625	Xoft, Inc. Series D (a)	2,050,000
		\$ 40,439,736

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PRINCIPAL AMOUNT			VALUE
		Convertible Notes 0.3%	
		Drug Discovery Technologies 0.1%	
\$	700,000	deCODE Genetics, Inc., 3.50% due 2011	\$ 460,250
		Emerging Biopharmaceuticals 0.1%	
	29,767	Raven biotechnologies Convertible Note, 5.00% due 2009 (Restricted) (c)	29,767
	198,971	Xanthus Pharmaceuticals, Inc. Promissory Note, 8.00% due 2008 (Restricted) (c)	198,971
		Healthcare Services 0.1%	
	352,908	CytoLogix Subordinated Promissory Note, 6.24% due 2010 (Restricted) (b) (c)	352,908
			\$ 1,041,896
		TOTAL CONVERTIBLE SECURITIES AND WARRANTS	
		(Cost \$42,742,859)	\$ 41,481,632

SHARES			
		COMMON STOCKS AND WARRANTS 81.4%	
		Biopharmaceuticals 31.4%	
	83,150	Adams Respiratory Therapeutics, Inc. (a)	4,967,381
	135,182	Affymax Inc. (a)	3,022,670
	320,571	Akorn, Inc. (a)	2,352,991
	108,889	Akorn, Inc. warrants (expiration 3/08/11) (a) (c)	211,245
	48,900	Alnylam Pharmaceuticals, Inc. (a)	1,422,012
	99,357	Amgen Inc. (a)	4,614,139
	81,735	Amylin Pharmaceuticals, Inc. (a)	3,024,195
	48,700	Biogen Idec Inc. (a)	2,772,004
	202,700	BioMarin Pharmaceuticals, Inc. (a)	7,175,580
	200,000	Cadence Pharmaceuticals, Inc. (a)	2,972,000
	756,272	Critical Therapeutics, Inc. (a)	960,465
	159,672	Critical Therapeutics, Inc. warrants (expiration 6/06/10) (a) (c)	19,161
	74,053	Cubist Pharmaceuticals, Inc. (a)	1,518,827
	82,000	Forest Laboratories, Inc. (a)	2,988,900
	23,370	Genentech, Inc. (a)	1,567,426
	79,257	Genzyme Corporation (a)	5,899,891
	272,650	Gilead Sciences, Inc. (a)	12,544,626
	68,547	Hologic, Inc. (a)	4,705,066
	184,953	Inspire Pharmaceuticals, Inc. (a)	1,106,019
	3,615	Intuitive Surgical, Inc. (a)	1,173,068
	83,697	Martek Biosciences Corporation (a)	2,475,757
	140,600	Medarex, Inc. (a)	1,465,052
	232,450	Medicines Company (a)	4,453,742
	51,500	Mentor Corporation	2,013,650

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SHARES		VALUE
COMMON STOCKS AND WARRANTS continued		
Biopharmaceuticals continued		
80,650	Merck & Co., Inc.	\$ 4,686,571
175,880	MiddleBrook Pharmaceuticals, Inc. warrants (expiration 4/29/10) (a) (c)	14,070
77,895	Myriad Genetics, Inc. (a)	3,615,886
106,170	Omrix Biopharmaceuticals, Inc. (a)	3,688,346
367,105	Synta Pharmaceuticals Corp. (a)	2,459,604
145,965	Vertex Pharmaceuticals, Inc. (a)	3,390,767
88,100	Xenoport, Inc. (a)	4,923,028
		98,204,139
Biotechnology 1.2%		
328,000	Athersys, Inc. (a) (c)	1,288,384
82,000	Athersys, Inc. warrants (expiration 6/08/12) (a) (c)	91,840
339,950	Momenta Pharmaceuticals, Inc. (a)	2,427,243
		3,807,467
Drug Delivery 1.1%		
227,550	Alkermes, Inc. (a) (f)	3,547,505
Drug Discovery Technologies 4.0%		
162,288	Avalon Pharmaceuticals, Inc. (a)	514,453
88,780	Celgene Corporation (a)	4,102,524
46,941	Cougar Biotechnology, Inc. (a)	1,534,971
1,601,039	MZT Holdings, Inc. (a) (b)	153,059
1,846,154	MZT Holdings, Inc. warrants (expiration 1/17/11) (a) (b) (c)	0
952,381	MZT Holdings, Inc. warrants (expiration 1/22/12) (a) (b) (c)	0
32,050	Shire Plc (d)	2,209,847
40,700	United Therapeutics Corporation (a)	3,974,355
200,000	Zyomyx, Inc. (Restricted) (a) (c)	2,000
		12,491,209
Emerging Biopharmaceuticals 5.8%		
522,470	ACADIA Pharmaceuticals Inc. (a)	5,783,743
90,552	DOV Pharmaceutical, Inc. warrants (expiration 12/31/09) (a) (c)	1,811
541,430	Exelixis, Inc. (a)	4,672,541
814,191	Lexicon Pharmaceuticals, Inc. (a)	2,466,999
242,522	NitroMed, Inc. (a)	244,947
200,000	Sangamo BioSciences, Inc. (a)	2,618,000
238,760	XTENT, Inc. (a)	2,354,173
		18,142,214
Generic Pharmaceuticals 5.5%		
144,500	Caraco Pharmaceutical Laboratories, Ltd. (a)	2,478,175
144,411	Impax Laboratories, Inc. (a)	1,566,859
330,800	Mylan Inc.	4,651,048
183,708	Teva Pharmaceutical Industries, Ltd. (d)	8,538,748
		17,234,830

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SHARES		VALUE
COMMON STOCKS AND WARRANTS continued		
Healthcare Services 9.1%		
28,000	Aetna Inc.	\$ 1,616,440
148,148	Aveta, Inc. (Restricted) (a) (c)	1,481,480
65,600	Centene Corporation (a)	1,800,064
30,478	Dako A/S (Restricted) (c) (e)	879,595
119,740	HealthExtras, Inc. (a)	3,122,819
66,524	ICON Plc (a) (d)	4,115,175
28,500	Medco Health Solutions, Inc. (a)	2,889,900
79,020	National Medical Health Card Systems, Inc. (a)	746,739
48,700	PAREXEL International Corporation (a)	2,352,210
204,139	Syntiro Healthcare Services (Restricted) (a) (c)	204
29,000	UnitedHealth Group, Inc.	1,687,800
40,250	WellPoint, Inc. (a)	3,531,133
885,000	Zix Corporation (a)	4,071,000
		28,294,559
Medical Devices and Diagnostics 23.3%		
119,960	Align Technology, Inc. (a)	2,000,933
132,090	Applera Corporation- Applied Biosystems Group	4,480,493
82,050	Baxter International Inc.	4,763,002
88,740	Becton, Dickinson and Company	7,416,889
77,000	BioForm Medical, Inc. (a)	525,910
74,292	IDEXX Laboratories, Inc. (a)	4,355,740
102,343	Inverness Medical Innovations, Inc. (a)	5,749,630
51,050	Laboratory Corporation of America Holdings (a)	3,855,806
20,500	Masimo Corporation	808,725
390,000	Masimo Corporation (Restricted) (c)	14,616,225
130,000	Masimo Laboratories, Inc. (Restricted) (a) (c)	33,696
447,080	Medwave, Inc. (a) (c)	0
111,770	Medwave, Inc. warrants (expiration 8/21/11) (a) (c)	0
228,012	NeuroMetrix, Inc. (a)	2,097,710
62,005	OmniSonics Medical Technologies, Inc. (Restricted) (a) (c)	620
52,110	Patterson Companies, Inc. (a)	1,769,135
99,600	PerkinElmer, Inc.	2,591,592
62,000	ResMed Inc. (a)	3,256,860
47,600	Respironics, Inc. (a)	3,116,848
139	Songbird Hearing, Inc. (Restricted) (a) (c)	93
44,225	Stryker Corporation	3,304,492
110,840	Thermo Fisher Scientific Inc. (a)	6,393,251
115,363	VNUS Medical Technologies, Inc. (a)	1,675,071
		72,812,721
TOTAL COMMON STOCKS AND WARRANTS		
	(Cost \$214,842,254)	\$ 254,534,644

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PRINCIPAL AMOUNT		VALUE
	SHORT-TERM INVESTMENTS 4.4%	
\$ 13,656,000	American Express Corporation; 4.00% 4.15% due 01/03/08 01/04/08	\$ 13,640,390
	TOTAL SHORT-TERM INVESTMENTS	
	(Cost \$13,640,390)	\$ 13,640,390
	TOTAL INVESTMENTS 99.0%	
	(Cost \$271,225,503)	\$ 309,656,666
	OTHER ASSETS IN EXCESS OF LIABILITIES - 1.0%	\$ 3,090,356
	NET ASSETS - 100%	\$ 312,747,022

-
- (a) Non-income producing security.
 - (b) Affiliated issuers in which the Fund holds 5% or more of the voting securities (Total Market Value of \$11,300,307).
 - (c) Security fair valued by the Valuation Committee of the Board of Trustees.
 - (d) American Depository Receipt.
 - (e) Foreign Security.
 - (f) A portion of security is pledged as collateral for call options.

SCHEDULE OF WRITTEN OPTIONS

NUMBER OF CONTRACTS (100 SHARES EACH)	CALL OPTION WRITTEN	EXPIRATION DATE	CURRENT VALUE
61	Alkermes, Inc., strike @ 17.5	Jan - 2008	\$ (915)
			\$ (915)

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Investment Valuation - Investments traded on national securities exchanges or in the over-the-counter market that are National Market System securities are valued at the last sale price or, lacking any sales, at the mean between the last bid and asked prices. Other over-the-counter securities are valued at the most recent bid prices as obtained from one or more dealers that make markets in the securities. Publicly-traded investments for which market quotations are not readily available or whose quoted price may otherwise not reflect fair value are valued at fair value as determined in good faith by the Trustees of the Fund. The fair value of venture capital and other restricted securities is determined in good faith by the Trustees. However, because of the uncertainty of fair valuations these estimated values may differ significantly from the values that would have been used had a ready market for these securities existed, and the differences could be material. Each such fair value determination is based on a consideration of relevant factors. Factors the Trustees consider may include (i) the existence of any contractual restrictions on the disposition of securities; (ii) information obtained from the issuer which may include an analysis of the company's financial condition, the company's products or intended markets or the company's technologies; and (iii) the price of a security negotiated at arm's length in an issuer's completed subsequent round of financing. Short-term investments with maturity of 60 days or less are valued at amortized cost.

Venture Capital and Other Restricted Securities - The Fund may invest in venture capital and other restricted securities if these securities would currently comprise of 40% or less of net assets. The value of the securities represents 19% of the Fund's net assets at December 31, 2007. The following table details the acquisition date, cost, carrying value per unit, and value of the Fund's venture capital and other restricted securities at December 31, 2007, as determined by the Trustees of the Fund. The Fund on its own does not have the right to demand that such securities be registered.

Security (g)	Acquisition Date	Cost	Carrying Value per Unit	Value
Agensys, Inc.				
Series C Cvt. Pfd.	2/14/02, 9/27/05	\$ 2,204,684	\$ 9.10	\$ 6,777,291
Series D Cvt. Pfd.	6/28/2007	498,021	9.10	1,257,899
Agilix Corporation				
Series B Cvt. Pfd.	11/8/01	1,663,667	0.06	94,540
Aveta, Inc.				
Restricted Common	12/21/05	2,003,069	10.00	1,481,480
CardioNet, Inc.				
Series C Cvt. Pfd.	5/3/01 - 3/25/03	3,702,649	3.50	3,680,001
Mandatorily Cvt. Pfd.	8/15/05 - 3/7/07	636,912	1,041.85	661,577
Warrants (expiration 5/01/11)	5/1/06	0	0.00	0
Warrants (expiration 8/29/11)	8/29/06	0	0.00	0
Ceres, Inc.				
Series C Cvt. Pfd.	12/23/98	1,000,950	6.50	1,625,000
Series C-1 Cvt. Pfd.	3/31/01	74,339	6.50	139,503
Series D Cvt. Pfd.	3/14/01	1,046,887	6.50	1,141,010
Series F Cvt. Pfd.	9/5/07	186,335	6.50	184,502
Warrants (expiration 9/05/15)	9/5/07	0	0.00	0
Concentric Medical, Inc.				
Series B Cvt. Pfd.	5/7/02, 1/24/03	2,220,206	1.40	4,529,410
Series C Cvt. Pfd.	12/19/03	1,000,192	1.40	1,627,906
Series D Cvt. Pfd.	9/30/05	638,586	1.40	637,466
CytoLogix Corporation				
Series A Cvt. Pfd.	1/13/98-7/21/99	1,078,567	0.01	3,222
Series B Cvt. Pfd.	1/11/01	509,067	3.14	475,459
Subordinated Promissory Note	11/29/07	364,291	100.00	352,908
Dako A/S				
Restricted Common	6/14/04	870,888	28.86	879,595
EPR, Inc.				
Series A Cvt. Pfd.	3/9/94	800,331	0.01	1,778
FlowCardia, Inc.				
Series C Cvt. Pfd.	8/29/07	1,719,754	1.07	1,708,334
Labcyte, Inc.				

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Series C Cvt. Pfd.	7/18/05	1,282,337	0.52	1,280,000
Magellan Biosciences, Inc.				
Series A Cvt. Pfd.	11/28/06	2,052,904	1.00	2,050,000
Masimo Corporation				
Restricted Common	8/14/96	910,530	37.48	14,616,225
Masimo Laboratories, Inc.				
Restricted Common	3/31/98	0	0.26	33,696
OmniSonics Medical Technologies, Inc.				
Series A-1 Cvt. Pfd.	10/1/03	1,200,343	0.76	781,218
Series B-1 Cvt. Pfd.	6/4/2007, 11/15/07	667,477	0.76	664,454
Restricted Common	5/24/01	1,606,320	0.01	620
PHT Corporation				
Series D Cvt. Pfd.	7/23/01	2,803,841	0.78	2,800,000
Series E Cvt. Pfd.	9/12/03-12/17/03	627,472	0.78	626,337

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Security (g)	Acquisition Date	Cost	Carrying Value per Unit	Value
Raven biotechnologies, Inc.				
Series B Cvt. Pfd.	12/12/00	\$ 2,001,150	\$ 0.21	\$ 251,515
Series C Cvt. Pfd.	11/26/02	1,554,400	0.21	388,600
Series D Cvt. Pfd.	6/23/05	803,792	0.07	200,068
Cvt. Note	11/13/07	31,874	100.00	29,767
Songbird Hearing, Inc.				
Restricted Common	12/14/00	2,003,239	0.67	93
Syntiro Healthcare Services				
Restricted Common	2/5/97	800,325	0.001	204
TargeGen, Inc.				
Series C Cvt. Pfd.	8/30/05	1,842,331	0.87	1,226,672
Series D Cvt. Pfd.	5/8/07	531,198	0.87	353,450
TherOx, Inc.				
Series H Cvt. Pfd.	9/11/00	2,001,626	3.86	167,869
Series I Cvt. Pfd.	7/8/05	386,273	3.86	384,733
Warrants (expiration 1/26/10)	1/26/05	0	0.00	0
Warrants (expiration 6/09/09)	6/9/04	0	0.00	0
Xanthus Pharmaceuticals, Inc.				
Series B Cvt. Pfd.	12/5/03 - 11/15/06	2,652,476	1.00	2,649,902
Cvt. Promissory Note	12/3/07	198,971	100.00	198,971
Xoft, Inc.				
Series D Cvt. Pfd.	3/23/07	2,055,919	3.20	2,050,000
Zyomyx, Inc.				
Series A New Cvt. Pfd.	2/19/99, 1/12/04	199,800	0.10	20,000
Series B New Cvt. Pfd.	3/31/04	112	0.10	20
New Restricted Common	2/19/99 - 7/22/02	2,401,101	0.01	2,000
		\$ 52,835,206		\$ 58,035,295

(g) See Schedule of Investments and corresponding footnotes for more information on each issuer.

Federal Income Tax Cost - At December 31, 2007, the total cost of securities for Federal income tax purposes was \$271,225,503. The net unrealized gain on securities held by the Fund was \$38,431,163, including gross unrealized gain of \$71,529,501 and gross unrealized loss of \$33,098,338.

Affiliate Transactions An affiliate issuer is a company in which the Fund holds 5% or more of the voting securities. Transactions with such companies during the three months ended December 31, 2007 were as follows:

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Insert for Affiliate Transactions

Issuer	Value on September 30, 2007	Purchases	Sales	Income	Value on December 31, 2007
Agilix Corporation	\$ 94,540	\$	\$	\$	94,540

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Concentric Medical, Inc.	6,794,782				6,794,782
CytoLogix Corporation	351,488	352,908		1,948	831,589
MZT Holdings, Inc.	2,816,072			99,027	153,059
PHT Corporation	3,426,337				3,426,337
	\$ 13,483,219	\$ 352,908		\$ 100,975	\$ 11,300,307

Item 2. Controls and Procedures.

(a) The registrant's principal executive officer and principal financial officer have concluded, based on their evaluation of the registrant's disclosure controls and procedures as conducted within 90 days of the filing date of this report, that these disclosure controls and procedures are adequately designed and are operating effectively to ensure that information required to be disclosed by the registrant on Form N-Q is (i) accumulated and communicated to the investment company's management, including its certifying officers, to allow timely decisions regarding required disclosure; and (ii) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

(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 has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3. Exhibits.

Separate certifications for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the Act (17 CFR 270.30a-2(a)). Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities and 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.

(Registrant) H&Q Life Sciences Investors
By (Signature and Title) /s/ Daniel Omstead
Daniel Omstead, President
Date 2/29/08

Pursuant to the requirements of the Securities and 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 (Signature and Title) /s/ Carolyn Haley
Carolyn Haley, Treasurer
Date 2/29/08
