

# John Hancock Mid Cap Growth Fund

Quarterly portfolio holdings 12/31/2023

 Investment Management

# Fund's investments

## As of 12-31-23 (unaudited)

	Shares	Value
<b>Common stocks 95.0%</b>		<b>\$1,326,968,474</b>
(Cost \$1,116,282,033)		
<b>Communication services 9.6%</b>		<b>133,676,028</b>
<b>Entertainment 6.8%</b>		
Liberty Media Corp.-Liberty Formula One, Series C (A)	280,254	17,692,435
Live Nation Entertainment, Inc. (A)	289,031	27,053,302
Roku, Inc. (A)	133,468	12,233,677
Spotify Technology SA (A)	204,744	38,473,445
<b>Interactive media and services 2.8%</b>		
Pinterest, Inc., Class A (A)	1,031,943	38,223,169
<b>Consumer discretionary 13.9%</b>		<b>194,202,431</b>
<b>Automobile components 2.2%</b>		
Mobileye Global, Inc., Class A (A)(B)	711,873	30,838,338
<b>Broadline retail 1.1%</b>		
Global-e Online, Ltd. (A)	404,871	16,045,038
<b>Diversified consumer services 0.6%</b>		
Duolingo, Inc. (A)	38,562	8,747,790
<b>Hotels, restaurants and leisure 3.6%</b>		
DraftKings, Inc., Class A (A)	874,801	30,836,735
Las Vegas Sands Corp.	396,631	19,518,212
<b>Specialty retail 3.7%</b>		
O'Reilly Automotive, Inc. (A)	12,484	11,860,799
Ross Stores, Inc.	284,193	39,329,469
<b>Textiles, apparel and luxury goods 2.7%</b>		
Deckers Outdoor Corp. (A)	30,276	20,237,387
On Holding AG, Class A (A)	622,494	16,788,663
<b>Consumer staples 3.8%</b>		<b>52,593,137</b>
<b>Beverages 1.3%</b>		
Celsius Holdings, Inc. (A)	325,106	17,724,779
<b>Personal care products 2.5%</b>		
e.l.f. Beauty, Inc. (A)	241,571	34,868,358
<b>Energy 4.0%</b>		<b>55,693,868</b>
<b>Oil, gas and consumable fuels 4.0%</b>		
Cheniere Energy, Inc.	162,304	27,706,916
Diamondback Energy, Inc.	62,706	9,724,446
Targa Resources Corp.	210,228	18,262,506
<b>Financials 7.5%</b>		<b>104,282,140</b>
<b>Capital markets 4.6%</b>		
Ares Management Corp., Class A	238,726	28,389,296
Tradeweb Markets, Inc., Class A	386,753	35,148,113
<b>Financial services 2.9%</b>		
Block, Inc. (A)	526,758	40,744,731
<b>Health care 21.8%</b>		<b>304,518,682</b>
<b>Biotechnology 3.5%</b>		
Exact Sciences Corp. (A)	520,598	38,513,840
United Therapeutics Corp. (A)	47,803	10,511,402
<b>Health care equipment and supplies 11.7%</b>		
Align Technology, Inc. (A)	133,996	36,714,904

	Shares	Value
<b>Health care (continued)</b>		
<b>Health care equipment and supplies (continued)</b>		
DexCom, Inc. (A)	361,429	\$44,849,722
Inspire Medical Systems, Inc. (A)	123,471	25,117,706
Insulet Corp. (A)	145,481	31,566,467
Shockwave Medical, Inc. (A)	127,935	24,379,294
<b>Health care providers and services 0.9%</b>		
agilon health, Inc. (A)(B)	1,027,215	12,891,548
<b>Health care technology 2.2%</b>		
Veeva Systems, Inc., Class A (A)	160,106	30,823,607
<b>Life sciences tools and services 3.5%</b>		
Agilent Technologies, Inc.	208,750	29,022,513
Medpace Holdings, Inc. (A)	65,663	20,127,679
<b>Industrials 11.0%</b>		<b>153,644,056</b>
<b>Aerospace and defense 2.7%</b>		
Axon Enterprise, Inc. (A)	145,748	37,651,081
<b>Building products 1.3%</b>		
Builders FirstSource, Inc. (A)	109,435	18,269,079
<b>Commercial services and supplies 2.3%</b>		
Copart, Inc. (A)	642,011	31,458,539
<b>Construction and engineering 1.9%</b>		
Fluor Corp. (A)	691,855	27,099,960
<b>Machinery 1.3%</b>		
The Toro Company	195,663	18,781,691
<b>Professional services 1.5%</b>		
EXL Service Holdings, Inc. (A)	660,736	20,383,706
<b>Information technology 19.9%</b>		<b>277,482,961</b>
<b>Electronic equipment, instruments and components 3.0%</b>		
Flex, Ltd. (A)	1,376,585	41,930,779
<b>IT services 5.7%</b>		
Gartner, Inc. (A)	64,811	29,236,890
MongoDB, Inc. (A)	60,556	24,758,321
Snowflake, Inc., Class A (A)	129,199	25,710,601
<b>Semiconductors and semiconductor equipment 5.2%</b>		
ARM Holdings PLC, ADR (A)(B)	464,500	34,904,853
MKS Instruments, Inc.	139,828	14,384,106
Universal Display Corp.	120,456	23,038,415
<b>Software 6.0%</b>		
CrowdStrike Holdings, Inc., Class A (A)	93,595	23,896,675
HubSpot, Inc. (A)	20,301	11,785,543
Informatica, Inc., Class A (A)	416,450	11,823,016
Workday, Inc., Class A (A)	81,015	22,365,001
Zscaler, Inc. (A)	61,603	13,648,761
<b>Materials 1.2%</b>		<b>17,273,191</b>
<b>Construction materials 1.2%</b>		
Vulcan Materials Company	76,090	17,273,191
<b>Real estate 1.4%</b>		<b>20,356,627</b>
<b>Real estate management and development 1.4%</b>		
CoStar Group, Inc. (A)	232,940	20,356,627

	Shares	Value
<b>Utilities 0.9%</b>		<b>\$13,245,353</b>
<b>Gas utilities 0.5%</b>		
Atmos Energy Corp.	57,167	6,625,655
<b>Multi-utilities 0.4%</b>		
CenterPoint Energy, Inc.	231,701	6,619,698
<b>Preferred securities 0.5%</b>		<b>\$7,651,253</b>
(Cost \$9,360,258)		
<b>Information technology 0.5%</b>		<b>7,651,253</b>
<b>Software 0.5%</b>		
Essence Group Holdings Corp. (A)(C)(D)	2,958,957	3,994,592
Lookout, Inc., Series F (A)(C)(D)	392,767	3,656,661
<b>Exchange-traded funds 2.8%</b>		<b>\$38,697,416</b>
(Cost \$35,872,090)		
iShares Russell Mid-Cap Growth ETF (B)	370,452	38,697,416
	<b>Yield (%)</b>	<b>Shares</b>
<b>Short-term investments 6.0%</b>		<b>\$83,635,775</b>
(Cost \$83,624,194)		
<b>Short-term funds 6.0%</b>		<b>83,635,775</b>
John Hancock Collateral Trust (E)	5.3645(F)	5,746,613
State Street Institutional U.S. Government Money Market Fund, Premier Class	5.2982(F)	26,168,493
<b>Total investments (Cost \$1,245,138,575) 104.3%</b>		<b>\$1,456,952,918</b>
<b>Other assets and liabilities, net (4.3%)</b>		<b>(60,620,638)</b>
<b>Total net assets 100.0%</b>		<b>\$1,396,332,280</b>

The percentage shown for each investment category is the total value of the category as a percentage of the net assets of the fund.

#### **Security Abbreviations and Legend**

ADR American Depositary Receipt

(A) Non-income producing security.

(B) All or a portion of this security is on loan as of 12-31-23. The value of securities on loan amounted to \$56,327,629.

(C) Restricted security as to resale. For more information on this security refer to the Notes to fund's investments.

(D) Security is valued using significant unobservable inputs and is classified as Level 3 in the fair value hierarchy.

(E) Investment is an affiliate of the fund, the advisor and/or subadvisor. This security represents the investment of cash collateral received for securities lending.

(F) The rate shown is the annualized seven-day yield as of 12-31-23.

## Notes to Fund's investments (unaudited)

**Security valuation.** Investments are stated at value as of the scheduled close of regular trading on the New York Stock Exchange (NYSE), normally at 4:00 P.M., Eastern Time. In case of emergency or other disruption resulting in the NYSE not opening for trading or the NYSE closing at a time other than the regularly scheduled close, the net asset value (NAV) may be determined as of the regularly scheduled close of the NYSE pursuant to the Valuation Policies and Procedures of the Advisor, John Hancock Investment Management LLC.

In order to value the securities, the fund uses the following valuation techniques: Equity securities, including exchange-traded or closed-end funds, are typically valued at the last sale price or official closing price on the exchange or principal market where the security trades. In the event there were no sales during the day or closing prices are not available, the securities are valued using the last available bid price. Investments by the fund in open-end mutual funds, including John Hancock Collateral Trust (JHCT), are valued at their respective NAVs each business day.

In certain instances, the Pricing Committee of the Advisor may determine to value equity securities using prices obtained from another exchange or market if trading on the exchange or market on which prices are typically obtained did not open for trading as scheduled, or if trading closed earlier than scheduled, and trading occurred as normal on another exchange or market.

Other portfolio securities and assets, for which reliable market quotations are not readily available, are valued at fair value as determined in good faith by the Pricing Committee following procedures established by the Advisor and adopted by the Board of Trustees. The frequency with which these fair valuation procedures are used cannot be predicted and fair value of securities may differ significantly from the value that would have been used had a ready market for such securities existed.

The fund uses a three tier hierarchy to prioritize the pricing assumptions, referred to as inputs, used in valuation techniques to measure fair value. Level 1 includes securities valued using quoted prices in active markets for identical securities, including registered investment companies. Level 2 includes securities valued using other significant observable inputs. Observable inputs may include quoted prices for similar securities, interest rates, prepayment speeds and credit risk. Prices for securities valued using these inputs are received from independent pricing vendors and brokers and are based on an evaluation of the inputs described. Level 3 includes securities valued using significant unobservable inputs when market prices are not readily available or reliable, including the Advisor's assumptions in determining the fair value of investments. Factors used in determining value may include market or issuer specific events or trends, changes in interest rates and credit quality. The inputs or methodology used for valuing securities are not necessarily an indication of the risks associated with investing in those securities. Changes in valuation techniques and related inputs may result in transfers into or out of an assigned level within the disclosure hierarchy.

The following is a summary of the values by input classification of the fund's investments as of December 31, 2023, by major security category or type:

	Total value at 12-31-23	Level 1 quoted price	Level 2 significant observable inputs	Level 3 significant unobservable inputs
<b>Investments in securities:</b>				
<b>Assets</b>				
Common stocks	\$1,326,968,474	\$1,326,968,474	—	—
Preferred securities	7,651,253	—	—	\$7,651,253
Exchange-traded funds	38,697,416	38,697,416	—	—
Short-term investments	83,635,775	83,635,775	—	—
<b>Total investments in securities</b>	<b>\$1,456,952,918</b>	<b>\$1,449,301,665</b>	<b>—</b>	<b>\$7,651,253</b>

**Investment in affiliated underlying funds.** The fund may invest in affiliated underlying funds that are managed by the Advisor and its affiliates. Information regarding the fund's fiscal year to date purchases and sales of the affiliated underlying funds as well as income and capital gains earned by the fund, if any, is as follows:

Affiliate	Ending share amount	Beginning value	Cost of purchases	Proceeds from shares sold	Realized gain (loss)	Change in unrealized appreciation (depreciation)	Dividends and distributions		Ending value
							Income distributions received	Capital gain distributions received	
John Hancock Collateral Trust	5,746,613	\$44,683,221	\$431,979,622	\$(419,197,437)	\$(8,359)	\$10,235	\$243,059	—	\$57,467,282

**Restricted securities.** The fund may hold restricted securities which are restricted as to resale and the fund has limited rights to registration under the Securities Act of 1933. Disposal may involve time-consuming negotiations and expenses, and prompt sale at an acceptable price may be difficult to achieve. The following table summarizes the restricted securities held at December 31, 2023:

Issuer, Description	Original acquisition date	Acquisition cost	Beginning share amount	Shares purchased	Shares sold	Ending share amount	Value as a percentage of net assets	Ending value
Essence Group Holdings Corp.	5-1-14 <sup>1</sup>	\$5,083,384	2,958,957	—	—	2,958,957	0.3%	\$3,994,592
Lookout, Inc., Series F	7-31-14 <sup>1</sup>	4,276,874	392,767	—	—	392,767	0.2%	3,656,661

Issuer, Description	Original acquisition date	Acquisition cost	Beginning share amount	Shares purchased	Shares sold	Ending share amount	Value as a percentage of net assets	Ending value
								\$7,651,253

<sup>1</sup> Reflects original acquisition date of security transferred in a merger with John Hancock Funds II Mid Cap Growth Fund which took place after market close on 10-15-21. For additional information on the fund's significant accounting policies and risks, please refer to the fund's most recent semiannual or annual shareholder report and prospectus.