

New York, May 13, 2019

MSCI US Equity Indexes

The following are changes in constituents for the MSCI US Equity Indexes which will take place as of the close of May 28, 2019.

SUMMARY OF THE CHANGES INCLUDED IN THIS ANNOUNCEMENT:

| Index | Nb of Securities Added | Nb of Securities Deleted |
|--------------------------------------|------------------------|--------------------------|
| MSCI US PRIME MARKET 750 INDEX | 27 | 13 |
| MSCI US SMALL CAP 1750 INDEX | 150 | 62 |
| MSCI US INVESTABLE MARKET 2500 INDEX | 150 | 48 |
| MSCI US MICRO CAP INDEX | 49 | 30 |

MSCI US PRIME MARKET 750 INDEX

Additions

ALTICE USA A
KKR & CO A
UBIQUITI NETWORKS
OKTA
DROPBOX A
ERIE INDEMNITY CO A
EPAM SYSTEMS
DOCUSIGN
TRADE DESK A
ZENDESK
RING CENTRAL A
SAGE THERAPEUTICS
ANGI HOMESERVICES A
FAIR ISAAC CORP
WORLD WRESTLING ENTMT A
FIVE BELOW
ZSCALER
MONGODB A
APTARGROUP
ROKU A
HILL-ROM HOLDING
GUARDANT HEALTH
CATALENT
NATIONAL INSTRUMENTS
ELASTIC NV
HEXCEL CORP
ALTERYX A

Deletions

AVNET
MDU RESOURCES GROUP
NEWMARKET CORP
AXIS CAPITAL HOLDINGS
MSC INDUSTRIAL DIRECT A
MATTEL
PINNACLE FINL PARTNERS
SPIRIT REALTY (NEW)
CORE LABORATORIES
ANTERO RESOURCES
MEDNAX
SENIOR HOUSING PPTYS
BROOKFIELD PPTY REIT A

MSCI US SMALL CAP 1750 INDEX

Additions

SMARTSHEET A
ADT
AVNET
MDU RESOURCES GROUP
PIVOTAL SOFTWARE A
TILRAY SV 2
NEWMARKET CORP
AXIS CAPITAL HOLDINGS
GATES INDUSTRIAL
MSC INDUSTRIAL DIRECT A
TFS FINANCIAL
MATTEL
PINNACLE FINL PARTNERS
CARGURUS A
CUSHMAN & WAKEFIELD
SCHNEIDER NATIONAL B
LAUREATE EDUCATION A
SPIRIT REALTY (NEW)
CORE LABORATORIES
ALLOGENE THERAPEUTICS
TENABLE HOLDINGS

Deletions

UBIQUITI NETWORKS
EPAM SYSTEMS
TRADE DESK A
ZENDESK
RING CENTRAL A
SAGE THERAPEUTICS
FAIR ISAAC CORP
WORLD WRESTLING ENTMT A
FIVE BELOW
ZSCALER
APTARGROUP
HILL-ROM HOLDING
CATALENT
NATIONAL INSTRUMENTS
HEXCEL CORP
SPOK HOLDINGS
ARLINGTON ASSET INV A
CECO ENVIRONMENTAL
SENECA FOODS CORP A
DEL FRISCO'S RESTAURANT
OWENS & MINOR

YETI HOLDINGS
COLONY NORTHSTAR CR A
ANTERO RESOURCES
CARVANA A
ALTAIR ENGINEERING A
STITCH FIX A
PLURALSIGHT A
ZUORA A
MEDNAX
SVMK
APPIAN A
MAGNOLIA OIL & GAS A
VERRA MOBILITY A
UPWORK
SENIOR HOUSING PPTYS
BLOOM ENERGY CORP A
CACTUS A
EVENTBRITE
FBL FINANCIAL GROUP A
BANDWIDTH A
ALLAKOS
STATE AUTO FINANCIAL
RUBIUS THERAPEUTICS
TWIN RIVER WORLDWIDE
MYOVANT SCIENCES
HAMILTON LANE A
AMERICAN FINANCE TRUST A
EHEALTH
KKR REAL EST FIN TRUST
SONOS
LIBERTY OILFIELD SVCS A
GOSSAMER BIO
CONTURA ENERGY
ENPHASE ENERGY
CODEXIS
VICTORY CAPITAL HOLDINGS
BERRY PETROLEUM
DMC GLOBAL
DOMO B
SELECT ENERGY SERVICES A
REPUBLIC BANCORP A (KY)
NATIONAL RESEARCH CORP
EVO PAYMENTS A
GREENSKY A
CARBON BLACK
EIDOS THERAPEUTICS
KINIKSA PHARMA A
MALIBU BOATS A
ONESP WORLD HOLDINGS
Y MABS THERAPEUTICS
SHOCKWAVE MEDICAL
OMEGA FLEX
TWIST BIOSCIENCE
WAITR HOLDINGS
AMERESCO A
JOHNSON OUTDOORS A
ORGANOGENESIS A
HANGER
EMC INSURANCE GROUP
PRINCIPIA BIOPHARMA
APOLLO MEDICAL HLDGS
ARVINAS
MERCANTIL BANK HOLDING A
PETIQ A
EVOLUS
OSIRIS THERAPEUTICS
HERITAGE-CRYSTAL CLEAN
COMMUNITY HEALTHCARE
CONSTRUCTION PRTRNS A
PRECISION BIOSCIENCES
WATFORD HOLDINGS
UNIVERSAL LOGIS HLDGS
ROAN RESOURCES A
MEIRAGTX HOLDINGS
RADNET

CBL & ASSOCIATES PPTYS
ARDELYX
ACLARIS THERAPEUTICS
POTBELLY
GP STRATEGIES CORP
FARMLAND PARTNERS
GENESIS HEALTHCARE A
GNC HOLDINGS A
FLEXSTEEL INDUSTRIES
NET 1 UEPS TECHNOLOGIES
BARNES & NOBLE EDUCATION
RIGNET
AMERICAN RENAL HOLDINGS
LA JOLLA PHARMACEUTICAL
DEAN FOODS CORP
AXOVANT GENE THERAPIES
JOUNCE THERAPEUTICS
IDT CORP B
ZOVIO
ADAMAS PHARMACEUTICALS
INNERWORKINGS
AGROFRESH SOLUTIONS
NAUTILUS
VITAMIN SHOPPE
ENERGIOUS CORP
SUPERIOR INDUSTRIES
BELLICUM PHARMACEUTICALS
MONEYGRAM INTERNATIONAL
INTERNAP CORP
CAPITAL SENIOR LIVING
APTINX
ULTRA PETROLEUM
HOVNANIAN ENTERPRISES A
BASIC ENERGY SERVICES
KEY ENERGY SERVICES
MAIDEN HOLDINGS
SIENNA BIOPHARMA
BABCOCK & WILCOX ENT
TELIGENT
BRISTOW GROUP
NANTKWEST

EXP WORLD HOLDINGS
SWITCH
BBX CAPITAL A
SPEEDWAY MOTORSPORTS
FIRST MID ILLINOIS
MODEL N
CRINETICS PHARMA
SYNTHORX
BOSTON OMAHA A
SURMODICS
EXELA TECHNOLOGIES
FUNKO A
AXONICS MODULATION TECH
CENTURY BANCORP A
STAR GROUP
AMALGAMATED BANK A
AXSOME THERAPEUTICS
BANCORP (THE)
CAI INTERNATIONAL
TRANSLATE BIO
CRAWFORD & CO A
ESTABLISHMENT LABS HLDGS
GOLDEN ENTERTAINMENT
TRANSENERIX
KRYSTAL BIOTECH
WILLDAN GROUP
KALVISTA PHARMACEUTICALS
GLOBAL INDEMNITY
CORINDUS VASCULAR
INTL MONEY EXPRESS
PARETEUM CORP
SIGA TECHNOLOGIES
FALCON MINERALS A
CRA INTERNATIONAL
TCR2 THERAPEUTICS
3PEA INTERNATIONAL
GOOSEHEAD INSURANCE A
CRYOPORT
LOVESAC
ALTUS MIDSTREAM A
GRITSTONE ONCOLOGY
REPLIMUNE GROUP
AMERICAN SOFTWARE A
NEW AGE BEVERAGES
PHASEBIO PHARMACEUTICALS
SI BONE INC
READING INTERNATIONAL A
COVENANT TRANSPORT A
MACATAWA BANK CORP
LIMELIGHT NETWORKS
AVALON GLOBOCARE
RADIANT LOGISTICS
US XPRESS ENTERPRISES A
HEALTH INSURANCE INNOV A

MSCI US INVESTABLE MARKET 2500 INDEX

Additions

ALTICE USA A
KKR & CO A
OKTA
DROPBOX A
ERIE INDEMNITY CO A
DOCUSIGN
ANGI HOMESERVICES A
MONGODB A
ROKU A
GUARDANT HEALTH
ELASTIC NV
ALTERYX A
SMARTSHEET A
ADT
PIVOTAL SOFTWARE A
TILRAY SV 2
GATES INDUSTRIAL

Deletions

SPOK HOLDINGS
ARLINGTON ASSET INV A
CECO ENVIRONMENTAL
SENECA FOODS CORP A
DEL FRISCO'S RESTAURANT
OWENS & MINOR
CBL & ASSOCIATES PPTYS
ARDELYX
ACLARIS THERAPEUTICS
POTBELLY
GP STRATEGIES CORP
FARMLAND PARTNERS
GENESIS HEALTHCARE A
GNC HOLDINGS A
FLEXSTEEL INDUSTRIES
NET 1 UEPS TECHNOLOGIES
BARNES & NOBLE EDUCATION

TFS FINANCIAL
CARGURUS A
CUSHMAN & WAKEFIELD
SCHNEIDER NATIONAL B
LAUREATE EDUCATION A
ALLOGENE THERAPEUTICS
TENABLE HOLDINGS
YETI HOLDINGS
COLONY NORTHSTAR CR A
CARVANA A
ALTAIR ENGINEERING A
STITCH FIX A
PLURALSIGHT A
ZUORA A
SVMK
APPIAN A
MAGNOLIA OIL & GAS A
VERRA MOBILITY A
UPWORK
BLOOM ENERGY CORP A
CACTUS A
EVENTBRITE
FBL FINANCIAL GROUP A
BANDWIDTH A
ALLAKOS
STATE AUTO FINANCIAL
RUBIUS THERAPEUTICS
TWIN RIVER WORLDWIDE
MYOVANT SCIENCES
HAMILTON LANE A
AMERICAN FINANCE TRUST A
EHEALTH
KKR REAL EST FIN TRUST
SONOS
LIBERTY OILFIELD SVCS A
GOSSAMER BIO
CONTURA ENERGY
ENPHASE ENERGY
CODEXIS
VICTORY CAPITAL HOLDINGS
BERRY PETROLEUM
DMC GLOBAL
DOMO B
SELECT ENERGY SERVICES A
REPUBLIC BANCORP A (KY)
NATIONAL RESEARCH CORP
EVO PAYMENTS A
GREENSKY A
CARBON BLACK
EIDOS THERAPEUTICS
KINIKSA PHARMA A
MALIBU BOATS A
ONESP WORLD HOLDINGS
Y MABS THERAPEUTICS
SHOCKWAVE MEDICAL
OMEGA FLEX
TWIST BIOSCIENCE
WAITR HOLDINGS
AMERESCO A
JOHNSON OUTDOORS A
ORGANOGENESIS A
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MERCANTIL BANK HOLDING A
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COMMUNITY HEALTHCARE
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WATFORD HOLDINGS

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AMERICAN RENAL HOLDINGS
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 OMEGA FLEX
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CRA INTERNATIONAL
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LIMELIGHT NETWORKS
PROTEON THERAPEUTICS
ASCENT CAPITAL GROUP A
NEURALSTEM
COHEN & COMPANY
KONA GRILL
OHR PHARMACEUTICAL
REVOLUTION LIGHTING TECH
SYNTHESIS ENERGY SYSTEMS
ALITHYA GROUP A SV

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