

September 12, 2017

Karyopharm Appoints Michael Falvey as Chief Financial Officer, Adds New Clinical Strategy and Human Resources Executives and Reports Inducement Grant Under NASDAQ Listing Rule 5635(c)(4)

- Michael Falvey, Formerly an Executive at Millennium Pharmaceuticals, Seven Bridges Genomics, Ahura Scientific, and Aspect Medical Systems, Brings 35 Years of Financial and Operational Experience at High Growth Companies —
 - Jatin Shah, MD, Formerly Associate Professor and Director of the Myeloma Clinical/Translational Research at MD
 Anderson Cancer Center, joins as Vice President, Clinical Strategy —
 - Joan Wood, Formerly VP, Head of Human Resources at Sarepta Therapeutics and SVP, Global Leadership and Organization Development at Genzyme Corporation, joins as Chief Human Resources Officer —

NEWTON, Mass., Sept. 12, 2017 (GLOBE NEWSWIRE) -- Karyopharm Therapeutics Inc. (Nasdaq:KPTI), a clinical-stage pharmaceutical company, today announced the appointment of Michael Falvey as Executive Vice President, Chief Financial Officer and Treasurer. In this role, Mr. Falvey will lead the Company's financial and capital markets strategy, as well as advise on business development and transactional activities. The Company also announced that Jatin Shah, MD has assumed the role of Vice President, Clinical Strategy, and Joan Wood has assumed the role of Chief Human Resources Officer.

Mr. Falvey brings to Karyopharm 35 years of experience in executing business growth and financial strategies for publicly-traded and privately-held companies, including senior financial leadership roles at healthcare-focused, scientific organizations. Prior to joining Karyopharm, he served as Chief Financial Officer at several high-growth, revenue-generating companies, including Seven Bridges Genomics, Analysis Group, Ahura Scientific and Aspect Medical Systems. Prior to that, Mr. Falvey served as Vice President, Finance at Millennium Pharmaceuticals, where he was responsible for leading all aspects of planning and executing financial strategy, including establishing financial functions around the launch of Velcade[®] (bortezomib) for multiple myeloma. Prior to Millennium, he also held financial positions at Fidelity Investments, Digital Equipment Corporation and General Electric. Mr. Falvey received a Master of Science in Management from the Sloan School of Management at the Massachusetts Institute of Technology and a Bachelor of Science from Georgetown University.

"Mike's deep experience with Wall Street and with product launches brings a financial and transactional background that is a welcome addition to Karyopharm, as we enter late-stage development of selinexor in hematologic and solid tumor malignancies," said Michael G. Kauffman, MD, PhD, Chief Executive Officer of Karyopharm. "Further, Mike's broad business background provides us with valuable expertise to foster and manage our ongoing development programs. This includes his experience at innovation-focused, revenue-generating companies, which will be paramount for our planned regulatory filings and commercialization of selinexor. We look forward to his contributions to the team."

Mr. Falvey commented: "Karyopharm has made great progress developing its pipeline of clinical-stage oncology candidates. With the entry of selinexor into Phase 3 clinical testing, and the potential for accelerated approvals across several indications, including myeloma, diffuse large B-cell lymphoma, and liposarcoma, the Company is an exciting growth story and I look forward to joining the team and contributing to our success."

Inducement Grant under NASDAQ Listing Rule 5635(c)(4)

In connection with the hiring of Mr. Falvey, the Compensation Committee of Karyopharm's Board of Directors granted a stock option to purchase 125,000 shares of Karyopharm's common stock to Mr. Falvey. The option was granted on September 11, 2017 as an inducement material to Mr. Falvey's acceptance of employment with Karyopharm in accordance with NASDAQ Listing Rule 5635(c)(4). The option has an exercise price of \$10.60 per share. The option vests over four years, with 25% of the original number of shares vesting on the one-year anniversary of the grant date and an additional 1/48th of the remaining shares vesting monthly thereafter, subject to Mr. Falvey's continued service as an employee of, or other service provider to, Karyopharm through the applicable vesting dates. In addition, the option will be immediately exercisable in full if, on or prior to the first anniversary of the consummation of a "change in control event," Mr. Falvey's employment is terminated for "good reason" by Mr. Falvey or terminated without "cause" by Karyopharm (as such terms are

defined in the applicable stock option agreement).

Jatin Shah, MD and Joan Wood

Dr. Shah has recently joined the Company as Vice President, Clinical Strategy. In this role, Dr. Shah is responsible for overseeing the clinical development strategy across all of Karyopharm's drug candidates, including coordinating with investigators and key opinion leaders and leading the medical monitoring of all clinical studies. Dr. Shah brings significant medical oncology experience, including in treating patients with multiple myeloma and clinical research. In 2016, Dr. Shah established O Cubed Consulting ("Optimizing Oncology Outcomes"), which provided oncology-focused consulting services to pharmaceutical companies. Dr. Shah served as Assistant Professor and then Associate Professor at The University of Texas MD Anderson Cancer Center from 2007 to 2016. He received his Doctor of Medicine and Bachelor of Science from Ohio State University.

Joan Wood has joined the Company as Chief Human Resources Officer. Ms. Wood is an experienced human resources executive with a proven track record in global talent management and leadership development. She has significant experience working in the biopharma industry and has effectively liaised with corporate and R&D leadership to facilitate change and achieve strategic goals. Prior to joining Karyopharm, she served as Vice President, Head of Human Resources and was a senior executive team member and company officer of Sarepta Therapeutics. Prior to that, she served as Senior Vice President, Global Leadership and Organizational Development for Genzyme Corporation during a ten-year rapid growth period prior to Genzyme's acquisition by Sanofi. She received a Master of Education from Boston University and a Bachelor of Arts from St. Joseph College. She also completed an executive development program in Business Management at the Sloan School of Management at the Massachusetts Institute of Technology.

"Joan's proven track record of building global human resources teams will be valuable as we enhance our organizational structure and capabilities to support our growth objectives, including preparations for the approval and launch of selinexor, and Jatin's experience treating patients with multiple myeloma and with clinical research, understanding of the lymphoma/myeloma landscape and strong relationships with the clinical community will support the development and execution of our clinical strategy," said Dr. Kauffman. "We welcome both of them to our team and look forward to their contributions."

About Selinexor

Selinexor (KPT-330) is a first-in-class, oral Selective Inhibitor of Nuclear Export / SINETM compound. Selinexor functions by binding with and inhibiting the nuclear export protein XPO1 (also called CRM1), leading to the accumulation of tumor suppressor proteins in the cell nucleus. This reinitiates and amplifies their tumor suppressor function and is believed to lead to the selective induction of apoptosis in cancer cells, while largely sparing normal cells. To date, over 2,100 patients have been treated with selinexor and it is currently being evaluated in several mid- and later-phase clinical trials across multiple cancer indications, including in multiple myeloma in a pivotal, randomized Phase 3 study in combination with Velcade[®] (bortezomib) and low-dose dexamethasone (BOSTON), in combination with low-dose dexamethasone (STORM) and backbone therapies (STOMP), and in diffuse large B-cell lymphoma (SADAL), and liposarcoma (SEAL), among others. Additional Phase 1, Phase 2 and Phase 3 studies are ongoing or currently planned, including multiple studies in combination with one or more approved therapies in a variety of tumor types to further inform the Company's clinical development priorities for selinexor. Additional clinical trial information for selinexor is available at www.clinicaltrials.gov.

About Karyopharm Therapeutics

Karyopharm Therapeutics Inc. (Nasdaq:KPTI) is a clinical-stage pharmaceutical company focused on the discovery and development of novel first-in-class drugs directed against nuclear transport and related targets for the treatment of cancer and other major diseases. Karyopharm's SINE™ compounds function by binding with and inhibiting the nuclear export protein XPO1 (or CRM1). In addition to single-agent and combination activity against a variety of human cancers, SINE™ compounds have also shown biological activity in models of neurodegeneration, inflammation, autoimmune disease, certain viruses and wound-healing. Karyopharm, which was founded by Dr. Sharon Shacham, currently has several investigational programs in clinical or preclinical development. For more information, please visit www.karyopharm.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those regarding the therapeutic potential of and potential clinical development plans for Karyopharm's drug candidates. Such statements are subject to numerous important factors, risks and uncertainties that may cause actual events or results to differ materially from Karyopharm's current expectations. For example, there can be no guarantee that any of Karyopharm's SINE™ compounds, including selinexor (KPT-330), will successfully complete necessary preclinical and clinical development phases or that development of any of Karyopharm's drug candidates will continue. Further, there can be no guarantee that any positive developments in Karyopharm's drug

candidate portfolio will result in stock price appreciation. Management's expectations and, therefore, any forward-looking statements in this press release could also be affected by risks and uncertainties relating to a number of other factors, including the following: Karyopharm's results of clinical trials and preclinical studies, including subsequent analysis of existing data and new data received from ongoing and future studies; the content and timing of decisions made by the U.S. Food and Drug Administration and other regulatory authorities, investigational review boards at clinical trial sites and publication review bodies, including with respect to the need for additional clinical studies; Karyopharm's ability to obtain and maintain requisite regulatory approvals and to enroll patients in its clinical trials; unplanned cash requirements and expenditures; development of drug candidates by Karyopharm's competitors for diseases for which Karyopharm is currently developing its drug candidates; and Karyopharm's ability to obtain, maintain and enforce patent and other intellectual property protection for any drug candidates it is developing. These and other risks are described under the caption "Risk Factors" in Karyopharm's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, which was filed with the Securities and Exchange Commission (SEC) on August 8, 2017, and in other filings that Karyopharm may make with the SEC in the future. Any forward-looking statements contained in this press release speak only as of the date hereof, and, except as required by law, Karyopharm expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Velcade[®] is a registered trademark of Takeda Pharmaceutical Company Limited

Contacts:

Investors:
Kimberly Minarovich
(646) 368-8014
kimberly@argotpartners.com

Gus Jenkins (646) 351-1067 gus@argotpartners.com

Media: Eliza Schleifstein (917) 763-8106 eliza@argotpartners.com