



2013 Annual Letter to Shareholders

Fellow Shareholders:

In our 2012 Annual Letter to Shareholders, we ended with the following statement. “The current market is one in which to be investing, not harvesting. We believe our actions in 2012 position us to realize greater value when the time to harvest is upon us.” We believe the market of 2012 has evolved into a market, currently, in which we may have the potential to harvest returns.

In 2013, investments from our portfolio returned \$30.4 million in cash to Harris & Harris Group. In July 2013, our portfolio company Xradia, Inc., was purchased by Carl Zeiss. We will receive up to \$15.2 million in proceeds from the sale, including amounts held in escrow. To date, we have received \$14 million of this \$15.2 million. Our investment cost in Xradia was \$4 million. In 2013, we also sold certain assets of SynGlyco, Inc., (previously Ancora Pharmaceuticals) to CordenPharma. We retained the vaccine-related assets. In January 2014, Kovio, Inc., was acquired by Thin Film Electronics ASA, but we received no proceeds from this sale.

On February 14, 2014, we announced the signing of definitive documents for the sale of Molecular Imprints Inc’s. semiconductor business to Canon. The merger currently is expected to be completed by the end of April 2014, after normal shareholder and government approvals. We expect to receive \$7.0 million in proceeds from the sale, including amounts to be held in escrow. We could receive an additional \$1.7 million upon the achievement of certain milestone payments. Our investment cost in Molecular Imprints was \$4.6 million. Interestingly, because of a strategic investment we were able to make in April and June 2011, primarily owing to our evergreen status, we will be the only financial investor to realize a return on our investment at the initial closing. Additionally, we will hold ownership in a financed new company established to utilize Molecular Imprints’ technology for applications in the biomedical and consumer electronics fields without needing to make an additional new investment. This gives us another opportunity to generate a return on our original investment in Molecular Imprints on top of the return generated from the acquisition by Canon.

As we enter 2014, we believe that the initial public offering (“IPO”) market is robust, currently. We do not know how long it will remain this way. As noted in our Annual Report on Form 10-K, we have companies that are planning for and/or beginning the process of pursuing potential sales and/or IPOs by hiring bankers and/or advisors to attempt to pursue such liquidity events. We look forward to providing more information to shareholders as the year progresses and as the plans of these companies become public.

Before discussing our excitement heading into 2014, we want to articulate that we are aware that our net asset value per share (“NAV”) has not yet begun to respond to the progress in our portfolio. We believe it will over the coming quarters and years. Our NAV ended 2013 at \$3.93. Our private portfolio is valued at \$93.9 million, as of December 31, 2013, a 19 percent discount from our cost basis in this portfolio as of the same date.

From September 30, 2013, to December 31, 2013, the value of our equity-focused venture capital portfolio, including our rights to potential future milestone payments from the sales of BioVex Group, Inc., and Nextreme Thermal Solutions, Inc., decreased by \$13,691,268, from \$106,004,713 to \$92,313,445. This decrease was primarily owing to a net decrease in value owing to a net increase in discounts for non-performance risk of \$13,306,583.

We define non-performance risk as the risk that the price per share (or implied valuation of a portfolio company) or the effective yield of a debt security of a portfolio company, as applicable, does not appropriately represent the risk that a portfolio company that requires or seeks to raise additional capital will be (a) unable to raise capital, will need to be shut down and will not return our invested capital; or (b) able to raise capital, but at a valuation significantly lower than the implied post-money valuation.

In the future, as these companies receive terms for additional financings or if they are unable to receive additional financing and, therefore, proceed with sales or shutdowns of the business, we expect the contribution of the discount for non-performance risk to vary in importance in determining the fair values of our securities of these companies. Changes in discounts for non-performance risk could positively or negatively affect the value of our portfolio companies in future quarters. A further discussion of the changes in value of our equity-focused venture capital portfolio can be found in the Management’s Discussion and Analysis (“MD&A”) section of our 2013 Annual Report on Form 10-K on pages 65-66.

We also note that while the valuations of our privately held, venture capital-backed companies may decrease, sometimes substantially, such decrease may facilitate an increase in our ownership of the overall company in conjunction with a follow-on investment in such company. In these cases, the ultimate return on our overall invested capital could be greater than it would have been without such interim decrease in valuation.

For example, Ultora, Inc., raised \$1.1 million in financing during the fourth quarter of 2013 at a discount to its previous round of financing. However, for Harris & Harris Group, for the same investment amount that we had previously earmarked for this financing, we increased our ownership from within the range of 10-15 percent of the voting ownership of Ultora to greater than 20 percent of the voting ownership. Our cost basis in Ultora was \$1,123,433 at December 31, 2013. Our value was \$238,391

at the same date. We believe this will be beneficial as Ultora continues to progress with its unique ultracapacitor technology.

Harris & Harris Group builds transformative companies from disruptive science. We invest in companies that statistically are called “tail distributions,” recently publicized by the writings of Nassim Taleb. We realize that we may lose money on our investments more times than we make money, but the downside of our strategy is an investment loss of one times (1x) our invested capital while the return potential is far less bounded. Additionally, we do not invest all our money at once, and thus, over time, we can begin to recognize the lemons ripening ahead of the plums. We can then invest more in the “plums” while limiting future investment in the “lemons.”

We will continue to have realized losses on investments such as Nextreme, Kovio and Contour Energy. However, these losses are offset by larger gains on such investments as Xradia and Solazyme. More importantly, our NAV already reflects these losses, while the future potential for companies such as Metabolon, D-Wave, HzO and Produced Water Absorbents are not reflected in our fair value accounting. In an early-stage venture capital investment vehicle such as Harris & Harris Group, we believe it is the future reality of these mid-to-late stage companies where investors should focus their time and understanding.

We would like to use the remainder of this letter to discuss with our shareholders our excitement heading into 2014. We believe multiple recent events shed light on the future direction of the company.

First, we are beginning to be recognized for our leadership role in early-stage innovation. In February 2014, we were recognized by Forbes as one of the few venture capital investors investing in meaningful technology companies. Additionally, we received recognition by the data firm Grant IQ as the number one investor in innovation. As an investor in transformative companies enabled by disruptive science, Harris & Harris Group is proud to be on the cutting edge of science and business. More importantly a national dialog is finally emerging that is focusing on the need for deeper scientific innovation if America is to retain its business leadership position.

Second, over the coming months, we will issue and publicize a series of blogs highlighting what we term as “H&H on the cutting edge.” Each of these papers will focus on a maturing company in our portfolio while also noting that Harris & Harris Group offers a unique way of participating in these companies’ growth while they are still private. We briefly highlight two examples, D-Wave and Metabolon, below. We suggest our shareholders follow both companies over the next 12 months.

We believe D-Wave Systems, Inc., is one example of Harris & Harris Group being on the cutting edge of science and business. Quantum computers – unlike conventional digital machines used since the onset of the computer age – have the potential to crunch through the data and overcome levels of complexity insurmountable for existing computers. Results that currently require existing digital computations longer than the age of the

universe to sort out digitally, might be found in minutes or even seconds using future quantum computers.

In the last eight years, D-Wave has progressed from theoretical models and unproven approaches to having Lockheed Martin, Google and the U.S. government as customers for its groundbreaking 512 qubit adiabatic quantum computing machines. The computational power of D-Wave's future generation processors is forecast by it to surpass that of all computers combined on the face of the earth within one decade.

As one would expect for this new paradigm in computing, there is much scientific debate surrounding D-Wave's approach. The cover story in *Time Magazine* on February 17, 2014, captured both sides of this debate well. The *Time Magazine* article ends by saying that the answers to whether D-Wave's computers are working as advertised "will in fact become apparent at some point in the next five or so years, as D-Wave punches out a couple more generations of computers and better benchmarking techniques evolve and we either do see a significant quantum speedup or we don't."

As with many investments, there is little opportunity if there is not diversity of opinion. This is especially true when you are commercializing the world's first quantum computer. Many more studies are ongoing, and we will await their conclusions, but after reading the story in *Time* and seeing the progress D-Wave is making, it is difficult not to believe the company has a real opportunity to transform the nature of computing.

We believe Metabolon is another company that demonstrates Harris & Harris Group is on the cutting edge of science and business. Metabolon completed a \$15 million mezzanine round of financing in December 2013, at an increase in value from the previous Series D financing. We believe this financing demonstrates the leadership position Metabolon has staked in metabolomics. Metabolomics is a rapidly expanding field of biochemical research and discovery focused on the measurement of small molecules involved in metabolism. It enables the mapping of these small molecules' pathways, in order to identify diseases, discover biomarkers and better understand complex biological processes.

Metabolon has performed more than 3,000 studies with more than 550 companies, including all of the top 10 global pharmaceutical companies. It has established its leadership in metabolomics over the past 12 years by publishing over 300 peer-reviewed articles, by obtaining over 60 issued patents, and by generating over \$96,000,000 in cumulative revenue.

In 2013, Metabolon launched three commercial diagnostic tests targeting both obesity-related diseases, such as type 2 diabetes and cancer. Metabolon's first obesity-related diagnostic test, Quantose IR™, detects insulin resistance in the earliest stages of type 2 diabetes. Metabolon's cancer diagnostic tests target urological cancers, such as prostate cancer, for which it launched two non-invasive, urine-based diagnostic tests in September 2013. Its first test, Prostarix™ helps determine the likelihood of prostate cancer in patients who are considering whether to have a biopsy. Its second test, Prostarix Plus™ helps validate the often incorrect, results in men who have had a negative prostate biopsy.

Shareholders will note that two recent announcements further support Metabolon's recent progress. On February 25, 2014, Metabolon announced partnerships with the Carlos Slim Institute, Patia and Clinica Ruiz for Quantose prediabetes testing in Mexico. Under the terms of the agreements, Patia and its affiliates will use Metabolon's Quantose IR™ technology in unprecedented large-scale studies in Mexico to test for prediabetes in up to three million overweight or obese adults and secondary school students who are obese and/or have a family history of diabetes. The goal of these studies is to detect prediabetes early and prescribe treatment to prevent progression to type 2 diabetes. Testing will be performed over four years, beginning with pilot studies in 2014.

On March 5, 2014, Metabolon entered into a collaboration agreement with Human Longevity Inc. ("HLI"), Craig Venter's new company. Metabolon will provide biochemical profiling services to assist HLI in its mission to tackle diseases of aging by building the world's largest and most complete human genotype, microbiome and phenotype database. In the initial term of the agreement Metabolon will perform small molecule analysis of 10,000 subjects and collaborate with HLI to map changes in the small molecules to end points of disease and gene mutations. Craig Venter is on the Scientific Advisory Board of Metabolon, which is how he was aware of Metabolon's leadership position. Metabolon retains the rights to commercialize small molecule diagnostic tests discovered in the collaboration.

The third reason for our excitement is that revenues, and especially commercial revenues of our portfolio companies, are continuing to increase each year. We aggregate the revenues of our equity-focused portfolio companies on an annual basis and report these aggregated amounts for the prior three calendar years in our MD&A section our Annual Report on Form 10-K, on pages 49-50. These revenues include contributions solely from those equity-focused portfolio companies that have yet to complete liquidity events (e.g., IPOs, up-listings, or merger and acquisition transactions) and are not in the process of being shut down as of December 31, 2013.

We had 20 of our 24 companies in our equity-focused venture capital portfolio as of December 31, 2013, that generate revenues ranging from nominal to significant from commercial sales of products and/or services, from commercial partnerships and/or from government grants. For these 20 companies, aggregate revenue increased 44 percent from \$186.6 million in 2012 to \$268.9 million in 2013.

The fourth reason for our excitement is that we continue to discover disruptive science from top research institutions and to build new companies. During the fourth quarter of 2013, Harris & Harris Group established and invested in a new portfolio company, ProMuc, Inc., to focus on the research and development of synthetic mucins. Mucins are a special class of glycoproteins, which provide many critical functions during gestation and in the maintenance of general health, such as providing lubrication and acting as a protective barrier to external harmful microorganisms. We believe that the development of synthetic mucins could potentially permit us to fabricate better biomimetic materials for a variety of commercial applications in the health and nutrition industries, including food additives, anti-microbial coatings, and anti-cancer vaccines. We have partnered

with Katharina Ribbeck at MIT and with CordenPharma to begin building this company, which currently is 100 percent owned by Harris & Harris Group.

Fifth, it is not just Harris & Harris Group that sees the excitement in these companies. It is difficult to pick up a scientific or popular publication and not read about D-Wave. Champions Oncology, Inc., was covered in Business Week in its issue on February 13, 2014. The March 8, 2014, issue of the Economist had stories on D-Wave, Cambrios Technologies, Inc., and Kovio in its Technology Quarterly. Metabolon has been in the press, most recently in MIT Technology Review, related to its partnership with Craig Venter's new company HLI. Please visit our web site at www.hhvc.com to see more recent coverage of our portfolio.

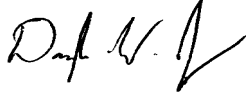
We have previously disclosed that we would be making venture capital investments in science-enabled companies, particularly those that are commercializing or integrating products enabled by nanotechnology or microsystems. This investment focus is not a fundamental policy and accordingly may be changed without shareholder approval, although we have stated that we intend to give shareholders at least 60 days' prior notice of any change in our nanotechnology focus.

In our Letter to Shareholders dated October 8, 2013, we noted our new investment focus on BIOLOGY+, which we define as investments in interdisciplinary life science companies where biology innovation is intersecting with innovations in areas such as electronics, physics, materials science, chemistry, information technology, engineering and mathematics. We focus on this intersection because we believe interdisciplinary innovation will be required in order to address many of the life science challenges of the future. To date, all of our BIOLOGY+ companies have also been commercializing or integrating products enabled by nanotechnology.

At this time, we are expanding our investment focus within the area of BIOLOGY+ and may make investments that are not enabled at the nanoscale or microscale. We will not make BIOLOGY+ investments that are not also nanotechnology or microsystems investments for 60 days from the receipt of this Annual Report. Our focus on BIOLOGY+ is not a fundamental policy, and we will not be required to give notice to shareholders prior to making a change from this focus.

Finally, we are excited to share the progress of a handful of our portfolio companies with the investment public at our April 30, 2014, Meet the Portfolio Day. This event will be hosted at the Harvard Club in New York City from 8:00 AM to 1:00 PM. Presenting companies include D-Wave, Metabolon, Champions, HzO, Adesto, Echopixel and AgBiome. Revenue for these seven companies increased over 100 percent in 2013. It will give our shareholders and the institutional investor universe the opportunity to better understand the future of these companies and to begin to see what impact they may have on Harris & Harris Group.

In closing, we are acutely conscious of the steps we need to take to make Harris & Harris Group competitive in 2014 and beyond. Realize. Invest. Partner. Return. We remain laser focused on this execution plan. We believe 2014 will be an important year in our execution on this plan.



Douglas W. Jamison
Chairman, Chief Executive Officer
and Managing Director

March 17, 2014

This letter may contain statements of a forward-looking nature relating to future events. These forward-looking statements are subject to the inherent uncertainties in predicting future results and conditions. These statements reflect the Company's current beliefs, and a number of important factors could cause actual results to differ materially from those expressed in this letter. Please see the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, as well as subsequent filings, filed with the Securities and Exchange Commission for a more detailed discussion of the risks and uncertainties associated with the Company's business, including but not limited to, the risks and uncertainties associated with venture capital investing and other significant factors that could affect the Company's actual results. Except as otherwise required by Federal securities laws, the Company undertakes no obligation to update or revise these forward-looking statements to reflect new events or uncertainties. The references to the website www.HHVC.com has been provided as a convenience, and the information contained on such website is not incorporated by reference into this letter.