

**Management's Discussion & Analysis**  
**For the fiscal year ended May 31, 2020**

**BIOQUAL, INC.**

**Prepared by:**

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**Chief Financial Officer**

## MANAGEMENT'S DISCUSSION AND ANALYSIS

### Newly adopted accounting pronouncements

The Company adopted the provisions of ASU 2016-02, Leases ("Topic 842"), as amended, as of June 1, 2019. The adoption of Topic 842 had a material impact on the Company's Consolidated Balance Sheets due to the recognition of certain right-of-use ("ROU") assets and lease liabilities. See Notes to the financial statement - Leases for new disclosures and policy information related to the Company's leases. Because of the transition method we used to adopt Topic 842, Topic 842 will not be applied to periods prior to adoption and the adoption of Topic 842 had no impact on the Company's previously reported results, or on opening equity at June 1, 2019.

### Items of Note

In fiscal year 2020, which ended on May 31, 2020, the Company realized net income of \$4,230,938 compared to net income of \$2,830,875 for fiscal year 2019, for reasons discussed in the results of operations section below.

During the second quarter of fiscal year 2020, the Company was awarded the National Institute of Allergies and Infectious Diseases (NIAID) contract entitled "Animal Care and Laboratory Support Services to the Vaccine Research Center." The seven-year contract has a maximum potential funding amount of \$69,174,672 including all options. The current funding is \$7,883,552 to cover costs incurred through September 27, 2020. The Company was the incumbent contractor in the renewal competition of the contract that expired on September 27, 2019. There are, however, no assurances that any options will be exercised.

During the fourth quarter of fiscal year 2020, BIOQUAL was awarded a seven-year Indefinite Delivery / Indefinite Quantity ("IDIQ") contract with the NIAID titled "Simian Vaccine Evaluation Units (SVEUs)". BIOQUAL was an incumbent contractor on the predecessor IDIQ contract. BIOQUAL was awarded this contract along with two other contractors. The contract has a maximum potential funding of \$66,355,351 (if BIOQUAL were to win all proposed task orders under the contract) over the seven-year period. On April 1, 2020, BIOQUAL was awarded two task orders totaling \$6,682,071 covering a seven-year period. The current funding obligated on the two task orders is \$579,882, covering costs incurred until March 31, 2021. There are, however, no assurances that BIOQUAL will be awarded any other task orders under this contract.

During the fiscal year and subsequent to the end of the fiscal year, the NIAID provided \$994,294 of additional funding for the existing task order "Refinement of a Pig-Tail Macaque Model of Gonococcal Infection" under Part B of the Pre-Clinical Models of Infectious Diseases (PCMID) Master Contract. The additional funds increase the total amount of the task order from \$1,705,236 to \$2,699,500. The contract period of performance end date was extended from November 23, 2019 to September 30, 2020. There are, however, no assurances that the Company will be awarded any other task orders under the PCMID Master Contract.

Based on fiscal year 2019 earnings, the Board of Directors declared a cash dividend of \$.70 per share for shareholders of record on September 25, 2019. The dividend was paid on October 16, 2019. This amount is \$.10 per share greater than the \$.60 per share cash dividend paid on October 10, 2018.

## COVID-19

On March 31<sup>st</sup>, 2020, BIOQUAL announced that it is developing programs for in-vivo testing of COVID-19 candidate vaccines. BIOQUAL's efforts to develop animal models for COVID-19 began in February 2020, in collaboration with Dr. Dan Barouch at Beth Israel Deaconess Medical Center and the Ragon Institute, both affiliated with Harvard Medical School. Over the past 5 months, in collaboration with Dr. Barouch and other organizations, BIOQUAL staff have been listed as co-authors of 6 peer reviewed articles in scientific journals. Certain data included in the articles were obtained during studies performed in our laboratories. Several of the articles are available for review on the Company's website ([www.bioqual.com](http://www.bioqual.com)).

For a number of years, BIOQUAL has been engaged in development of in-vivo testing programs and has been extensively involved in research efforts to develop vaccines and therapies against emerging diseases including AIDS, Hepatitis, Zika, Chikungunya and others. The Company is now focused on COVID-19 research and is playing an important role in the development of vaccines and therapies against this epidemic.

### Results of Operations

#### Results of Operations 2020 versus 2019

The \$6,882,122 increase in revenues to \$46,360,201, for fiscal year 2020, compared to \$39,478,079 for fiscal year 2019, is primarily the result of increased activity in commercial contracts of approximately \$8,468,000. Approximately \$2,800,000 of the increased commercial contracts revenue is related to animal model, vaccine and therapeutics development to research and treat COVID-19. The increase in revenues from commercial contracts was partially offset by a decrease in revenue generated from government contracts of approximately \$1,473,000 and federal grants of approximately \$113,000. The increase in commercial contract revenues is primarily the result of several new projects starting up and being performed for two large pharmaceutical company clients during the second and third quarters compared to similar projects starting up in the same period of fiscal year 2019.

The \$4,604,569 increase in contract operating expenses for fiscal year 2020, primarily reflects increases in expenses incurred of approximately \$3,600,000 related to the purchase of nonhuman primates and other research animals, an increase in depreciation expense (resulting from the increase in capital expenditures in the current and previous fiscal years), rent expense, IT and related costs and contract materials and supplies when compared to similar costs incurred in the previous fiscal year. Additionally, operations labor and related benefits costs increased approximately \$1,375,000, reflecting the effect of hires made in the second half of the previous fiscal year to support the increasingly complex operational and regulatory issues involved in performing services for our clients as well as keeping pace with increased contract activity related to supporting COVID-19 research. The increase in contract operating expenses is partially off-set by decreases in certain facilities/maintenance expenses and contract related subcontractor costs of approximately \$400,000.

The \$539,492 increase in G&A expenses primarily reflects the increases in administrative labor and related benefits costs of approximately \$690,000 compared to the previous fiscal year. The increase in G&A expenses is partially off-set by decreases in franchise taxes, utilities expenses, software implementation costs and legal fees of approximately \$140,000 compared to similar costs incurred in

the previous fiscal year.

The \$1,738,061 increase in operating income primarily reflects the profits earned on a higher volume of commercial contracts during fiscal year 2020 compared to the fiscal year. Additionally, during the first quarter of fiscal year 2020, the Company successfully negotiated the addition of approximately \$300,000 of funding on fixed-price-per-unit contracts with commercial clients to cover contract costs incurred in the previous fiscal year

### Liquidity and Capital Resources

During fiscal year 2020, the Company directed approximately \$2,404,000 towards capital expenditures, compared to approximately \$1,868,000 in fiscal year 2019. These expenditures were necessary to provide additional equipment and nonhuman primate (NHP) and rodent cages for research being performed in the Company's laboratories, including approximately \$580,000 for items to support the influx COVID-19 research contracts. The Company has been able to continue to fund all of these expenditures through the use of available cash provided by the Company's operations.

During fiscal year 2021, the Company estimates the aggregate purchase price of equipment to upgrade older equipment, enhance its capabilities, add NHP and small animal caging, and to continue renovating animal housing space will total approximately \$1,700,000.

In December 2018, the Company entered into an eight-year office and laboratory lease located at 9600 Medical Center Dr., Rockville, Maryland with total lease payments of approximately \$4,901,000. The Company has engaged an architectural and engineering (A&E) firm to assist with the design and build-out of approximately 10,700 square feet of space to be utilized as a vivarium. The Company estimates the purchase of an additional \$800,000 in infrastructure, cage washing, sanitation, and animal care equipment over the next six to nine months. With the assistance of the A&E firm, the Company is currently determining the construction costs of the vivarium. The construction costs are presently estimated at between \$2,000,000 and \$4,000,000. Management is developing its approach to funding the construction costs for this project. Based on discussion with the A&E firm, the Company anticipates the vivarium will be operational not earlier than January 2021.

The Company is obligated, as lessee, under non-cancelable operating leases covering its facilities and certain equipment at various dates through 2026. Rent expense for fiscal year 2020 was approximately \$3,757,000. As of May 31, 2020, the total of the future minimum rental payments is approximately \$18,863,000 through 2027.

Subsequent to the end of fiscal year 2020, the Company entered into a lease for 9,416 square feet of office space located at 9620 Medical Center Drive, Rockville, Maryland for a term of seven years and four months including an option for 5 additional years, with total lease payments of approximately \$1,387,000. The lease commenced on July 1, 2020 and the Company will utilize this space to accommodate the expected continued growth of its staff and to provide adequate space for social distancing until the end of the COVID-19 pandemic. Total future lease payments on this lease are not included in the amount shown in the paragraph above as the lease did not start until after the end of fiscal year 2020.

Other than the items mentioned above, the Company does not anticipate substantial capital and other

expenditures during fiscal year 2021. However, if the Company is awarded new contracts that require additional equipment or animal enclosures during that period, the Company believes it will have sufficient capital resources to provide for the purchase of the equipment.

BIOQUAL has a \$2,000,000 line of credit with M&T Bank available to help cover costs of its daily operations. The line of credit is due on demand and renewable annually. As of May 31, 2020, there was no balance due on the line of credit. The interest rate on funds drawn on the line of credit is the prime rate plus .25%, which as of May 31, 2020, was 3.75%. On May 31, 2020, the Company had a balance of cash and cash equivalents of \$10,256,437. With the above line of credit and the cash resources expected to be available as a result of collection of accounts receivable, the Company believes it will have sufficient capital resources to provide for daily operations and its capital needs through the end of fiscal year 2021.

The following provides additional information on select balance sheet items: 1) the \$3,020,250 increase in accounts receivable primarily reflects the impact of the increased volume of commercial contracts activity as well as slower collection of outstanding invoices compared to the end of the previous fiscal year. The increase in accounts receivable is partially off-set by a decrease in unbilled accounts receivable reflecting the issuance of a several invoices for work recorded in unbilled receivables at May 31, 2019; 2) the \$915,150 increase in prepaid expenses and income taxes receivable primarily reflects deposits for the purchase of nonhuman primate and ferret cages and a \$739,651 increase in prepaid contract assets; 3) the \$1,164,444 increase in accounts payable primarily reflects a higher amount of outstanding invoices for the purchase of nonhuman primates as compared to similar balances due on May 31, 2019; 4) the \$558,551 increase in deferred revenue primarily reflects increases due to meeting certain milestones for which advance payments had previously been received on certain commercial contracts; and 5) the \$344,930 increase in accrued compensation and related liabilities primarily reflects bonuses accrued for performance of staff during the COVID-19 pandemic.

During the 3<sup>rd</sup> quarter of fiscal year 2020, the Company temporarily shifted its focus away from supporting AIDS, influenza and other infectious disease research to apply the majority of its resources to supporting the global need for vaccines and therapeutics to combat COVID-19. Although the Company had a few non-COVID-19 contracts cancelled, the lost revenue was quickly replaced by contracts related to potential COVID-19 vaccines and therapeutics.

In response to the effects on the economy of COVID-19, the Company has contacted its critical suppliers to ensure the continued delivery of necessary materials to keep our employees safe and healthy at the workplace as well as to continue to provide animal husbandry and required procedures for our clients. To date, the Company has been able to procure adequate quantities of critical materials and supplies to continue operations. Based on market demand, the Company has had to pay higher prices for certain critical items which may have a short-term adverse impact on the results of operations. There are, however, no assurances that BIOQUAL will be able to continue obtaining such critical materials without interruption.

Due to the increased need for nonhuman primates for COVID-19 related research, a potential shortage of certain nonhuman primate species has become a concern to Management. The reduced supply may adversely affect the Company's ability to support AIDS and other infectious disease research over the next year. Management stays in contact with its supplier to stay up to date on nonhuman primate market conditions.

Additionally, there are several new line items on the balance sheet related to the adoption of Topic 842 which changed the Company's method for accounting for leases. The operating lease right-of-use assets and operating lease liabilities balances reflect the Company's future lease commitments. Please refer to the Notes to financial statements for more information related to the adoption of Topic 842.

Refer to the Statements of Cash Flows on pages 7 and 8 of the Audited Financial Statements for the years ended May 31, 2020 and 2019, for further detail related to the changes in cash and cash equivalents.

### Forward Looking Information

Statements herein that are not descriptions of historical facts are forward-looking and subject to risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors including risks relating to the ability to continue to extend current government contracts; the Company's ability to obtain new government or commercial contracts; continued demand for the use of animal models in scientific research; the Company's ability to perform under its contracts in accordance with the requirements of the contracts; the actual costs incurred in performing the Company's contracts and its ability to manage its costs, including its capital expenditures; dependence on third parties; future capital needs; the ability to fund its capital needs through the use of its cash on hand and line of credit; and the future availability and cost of financing/capital sources to the Company.