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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

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**FORM S-1  
REGISTRATION STATEMENT  
Under  
THE SECURITIES ACT OF 1933**

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**IBIO, INC.**

(Exact Name of Registrant as Specified in Its Charter)

<b>Delaware</b>	<b>2834</b>	<b>26-2797813</b>
<b>(State of Other Jurisdiction of Incorporation or Organization)</b>	<b>(Primary Standard Industrial Classification Code Number)</b>	<b>(I.R.S. Employer Identification Number)</b>

**9 Innovation Way, Suite 100, Newark, Delaware 19711**  
(Address of Principal Executive Offices, including Zip Code)

**Robert B. Kay**  
**Chief Executive Officer**  
**9 Innovation Way, Suite 100**  
**Newark, Delaware 19711**  
**(302) 355-0650**  
(Name, Address and Telephone Number of Agent for Service)

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*with copies to:*

**Andrew H. Abramowitz**  
**Davis Wright Tremaine LLP**  
**1633 Broadway**  
**27<sup>th</sup> Floor**  
**New York, New York 10019**  
**(212) 489-8340 (fax)**

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**Approximate date of commencement of proposed sale to the public:** From time to time after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "accelerated filer," "large accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer       Accelerated filer       Non-accelerated filer       Smaller reporting company

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#### CALCULATION OF REGISTRATION FEE

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Title of Each Class of Securities to be Registered	Amount to be Registered <sup>(1)</sup>	Proposed Maximum Offering Per Price Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, Par Value \$0.001	4,615,385	\$ 1.23 <sup>(2)</sup>	\$5,676,923.55	\$ 316.77
Common Stock, Par Value \$0.001 <sup>(3)</sup>	100,000	\$ 0.35 <sup>(4)</sup>	\$ 35,000.00	\$ 1.95
Common Stock, Par Value \$0.001 <sup>(5)</sup>	250,587	\$ 0.65 <sup>(4)</sup>	\$ 162,881.55	\$ 9.09

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- (1) In addition to the shares set forth in the table, pursuant to Rule 416(a) under the Securities Act of 1933, as amended, this registration statement also covers an indeterminate number of shares of common stock that may be issuable as a result of stock splits, stock dividends and anti-dilution provisions.
- (2) Estimated pursuant to Rule 457(c) solely for the purposes of calculating amount of the registration fee; computed, pursuant to Rule 457(c), upon the basis of the average of the high and low prices of the common stock as quoted on the OTC Bulletin Board on October 7, 2009.
- (3) Represents shares of common stock issuable upon the exercise of warrants at an exercise price of \$0.35 per share.
- (4) Calculated pursuant to Rule 457(g) based upon the price at which the warrants may be exercised.
- (5) Represents shares of common stock issuable upon the exercise of warrants at an exercise price of \$0.65 per share.

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**The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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## EXPLANATORY STATEMENT

Pursuant to Rule 429 of the Securities Act of 1933, the prospectus which is a part of this Registration Statement is a combined prospectus and includes all of the information currently required in a prospectus relating to the securities covered by Registration Statement No. 333-158759, for which all filing fees have been previously paid, as well as 4,881,590 shares of common stock not currently covered by a Registration Statement. This Registration Statement, which relates to an aggregate of 9,657,476 shares of common stock, par value \$0.001, of the registrant as of October 7, 2009, also constitutes a Post-Effective Amendment to Registration Statement No. 333-158759.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 9, 2009

## PROSPECTUS

**9,657,476 Shares**

**iBio, Inc.**

### COMMON STOCK

The selling stockholders listed in this prospectus are offering and selling from time to time up to 9,657,476 shares of common stock of iBio, Inc. Of these shares, 2,696,339 are issuable upon the exercise of outstanding warrants. We will receive none of the proceeds from the sale, except upon exercise of the warrants. We have agreed to pay certain expenses in connection with the registration of the shares of common stock and to indemnify the selling stockholders against liabilities.

The selling stockholders may sell the securities from time to time on any stock exchange or automated interdealer quotation system on which the securities are listed, in the over-the-counter market, in privately negotiated transactions or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at prices otherwise negotiated.

Our common stock is quoted on the OTC Bulletin Board under the symbol "IBPM.OB". On October 7, 2009, the high and low bid prices for shares of our common stock were \$1.25 and \$1.20 per share, respectively.

**Our business and an investment in our common stock involve significant risks. See "Risk Factors" beginning on page 2.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is \_\_\_\_\_, 2009.

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. Neither we nor the selling stockholders are making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus. In this prospectus, the “Company,” “iBio”, “we,” “us” and “our” refer to iBio, Inc.

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### IMPORTANT NOTICE TO READERS

This prospectus is part of a registration statement on Form S-1 that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration process, the selling stockholders may, from time to time, offer shares of our common stock that they own. Each time the selling stockholders offer shares of common stock under this prospectus, they will provide a copy of this prospectus and, if applicable, a copy of a prospectus supplement. You should read both this prospectus and, if applicable, any prospectus supplements together with the information incorporated by reference in this prospectus and, if applicable, any supplement hereto. See “Where You Can Find Additional Information” and “Incorporation of Certain Documents by Reference” for more information.

We have not authorized anyone to provide you with information other than the information contained herein or incorporated by reference as set forth under “Incorporation of Certain Documents by Reference”. None of the shares of common stock covered by this prospectus are being offered in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus speaks only as of the date of this prospectus and the information in the documents incorporated or deemed to be incorporated by reference in this prospectus speaks only as of the respective dates those documents were filed with the SEC.

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## SUMMARY PROSPECTUS

*This summary highlights selected information contained elsewhere in this prospectus and may not contain all the information that you need to consider in making your investment decision. Before making a decision to purchase our common stock, you should read the entire prospectus carefully, including the "Risk Factors" and "Forward-Looking Statements" sections and our consolidated financial statements and the notes to those financial statements.*

### **Our Company**

iBio, Inc., a Delaware corporation (formerly iBioPharma, Inc.), is a biotechnology company focused on developing vaccines and therapeutic proteins based upon our proprietary plant-based iBioLaunch™ Platform Technology. Our near-term focus is to advance an H1N1 influenza vaccine candidate to clinical trials and to establish business arrangements for use of our technology by licensees for the development and production of products for the prevention and treatment of various infectious diseases including influenza, anthrax and human papilloma virus (HPV).

We believe our technology has broad product applicability, and that through license agreements and technology transfer contracts with companies and government entities to establish regional vaccine manufacturing facilities, we may be able to generate revenue prior to regulatory approval of individual products. We believe this business strategy will reduce product specific risk while advancing the commercial value of our technology and the value of our product candidates. We expect license agreements for commercial rights to our product candidates to produce additional revenue.

### **Our Corporate Information**

We are a Delaware corporation. Our principal executive/administrative offices are located at 9 Innovation Way, Suite 100, Newark, Delaware 19711, and our telephone number is (302) 355-0650. Our website address is <http://www.ibioinc.com>. Information on or accessed through our website is not incorporated into this prospectus and is not a part of this prospectus. Our common stock is quoted on the OTC Bulletin Board under the symbol "IBPM.OB."

### **The Offering**

Common stock offered by selling stockholders	9,657,476 shares, consisting of 6,961,137 outstanding shares owned by selling stockholders and 2,696,339 shares issuable upon the exercise of certain warrants held by the selling stockholders.
Common stock outstanding before the offering	27,972,904 shares.
Common stock outstanding after the offering	30,669,243 shares. <sup>(1)</sup>
Proceeds to us	We will not receive any of the proceeds from the sale of the shares of common stock because they are being offered by the selling stockholders. We are not offering any shares for sale under this prospectus. However, we will receive the proceeds from any exercise of the warrants, which would be used for general corporate and working capital purposes.

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(1) Assumes the exercise of warrants to purchase 2,696,339 shares held by selling stockholders.

## RISK FACTORS

*Our past experience may not be indicative of future performance, and as noted elsewhere in this prospectus, we have included forward-looking statements about our business, plans and prospects that are subject to change. Forward-looking statements are particularly located in, but not limited to, the sections "Description of Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." In addition to the other risks or uncertainties contained in this prospectus, the following risks may affect our operating results, financial condition and cash flows. If any of these risks occur, either alone or in combination with other factors, our business, financial condition or operating results could be adversely affected. Moreover, readers should note this is not an exhaustive list of the risks we face; some risks are unknown or not quantifiable, and other risks that we currently perceive as immaterial may ultimately prove more significant than expected. Statements about plans, predictions or expectations should not be construed to be assurances of performance or promises to take a given course of action.*

### **Risks Relating to our Business**

***Our plant-based technology platform has not previously been used by others to successfully develop products, and if we are not able to establish licenses of the platform, we may not generate sufficient license revenues to fulfill our business plan.***

If we are unable to convince others to adopt the use of the platform in addition to or instead of other methods to produce vaccines and therapeutic proteins, we will not generate the revenues presently contemplated by our business plan to support our continuing operations.

***Our product candidates are in the preclinical stage of development, and if we or our licensees are not able to successfully develop and commercialize them, we may not generate sufficient revenues to continue our business operations.***

We have five internal product candidates and two additional categories--biodefense and developing world--made through the application of our technology platform, none of which has entered human clinical trials and for none of which an investigational new drug application (IND) has been filed with the FDA. Our success in establishing licenses to our platform will substantially depend on our ability to successfully complete clinical trials, obtain required regulatory approvals for our product candidates alone or with other persons. If the studies described above or any further studies fail, if we do not obtain required regulatory approvals, or if we fail to commercialize any of our product candidates alone or with licensees, we may be unable to generate sufficient revenues to attain profitability or continue our business operations, and our reputation in the industry and in the investment community would likely be significantly damaged, each of which would cause our stock price to decline and your holdings of our stock to lose most, if not all, of their value.

***We will not be able to commercialize our product candidates if our preclinical studies do not produce successful results or our clinical trials do not demonstrate safety and efficacy in humans.***

Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and has an uncertain outcome. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and interim results of a clinical trial do not necessarily predict final results. We may experience numerous unforeseen events during, or as a result of, preclinical testing and the clinical trial process that could delay or prevent our ability to commercialize our product candidates, including the following:

- Our preclinical or clinical trials may produce negative or inconclusive results, which may require us to conduct additional preclinical testing or clinical trials or to abandon projects that we expect to be promising. For example, we may obtain promising animal data about the immunogenicity of a vaccine candidate and then our human tests may result in no or inadequate immune responses. In addition, we may encounter unexpected safety concerns that would require further testing even if the vaccine candidate produced a very significant immune response in human subjects.
- Initial clinical results may not be supported by further or more extensive clinical trials. For example, we may obtain data that suggest a desirable immune response from one of our vaccine candidates in a small human study, but then when tests are conducted on larger numbers of people, we may not see the same extent of immune response. If the immune response generated by a vaccine is too low, or occurs in too few treated individuals, then the vaccine will have no commercial value.

- Enrollment in our clinical trials may be slower than we currently anticipate, resulting in significant delays. The cost of conducting a clinical trial increases as the time required to enroll adequate numbers of human subjects to obtain meaningful results increases. Enrollment in a clinical trial can be a slower-than-anticipated process because of competition from other clinical trials, because the study is not of interest to qualified subjects, or because the stringency of requirements for enrollment limits the number of people who are eligible to participate in the clinical trial.
- We might have to suspend or terminate our clinical trials if the participating patients are being exposed to unacceptable health risks. Animal tests do not always adequately predict potential safety risks to human subjects. We will not know the risk of any candidate product until it is tested in human subjects, and if subjects experience adverse events during the clinical trial, the trial may have to be suspended and modified or terminated entirely.
- Regulators or institutional review boards may suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements.
- Any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the product not commercially viable.
- The effects of our product candidates may not be the desired effects or may include undesirable side effects.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete our clinical trials or other testing, or if the results of these trials or tests are not positive or are only modestly positive, we may be delayed in obtaining marketing approval for our product candidates, we may not be able to obtain marketing approval or we may obtain approval for indications that are not as broad as intended. Our product development costs will also increase if we experience delays in testing or approvals. We do not know whether planned clinical trials will begin as planned, will need to be restructured or will be completed on schedule, if at all. Significant clinical trial delays could allow our competitors to bring products to market before we do and impair our ability to commercialize our products or product candidates. Poor clinical trial results or delays may make it impossible to license a product or so reduce its attractiveness to a licensing partner that we will be unable to successfully commercialize a product.

***We will need substantial additional funding to shepherd our product candidates through the clinical testing process and may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our product development programs or commercialization efforts.***

We expect our research and development expenses to increase in connection with our ongoing activities, particularly as the scope of the clinical trials that we are conducting expands. In addition, subject to regulatory approval of any of our product candidates, we expect to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. We will need substantial additional funding and may be unable to raise capital when needed or may be unable to raise capital on attractive terms, which would force us to delay, reduce or eliminate our research and development programs or commercialization efforts.

We believe that our existing cash resources, along with our \$3.0 million private placement of common stock that closed in September 2009 and support from FhCMB collaborators, will be sufficient to meet our projected operating requirements only through the fall of 2010. Our future funding requirements will depend on many factors, including:

- the scope and results of our clinical trials;
- our ability to advance additional product candidates into development;
- the success of our anticipated commercial agreements with pharmaceutical companies;
- our ability to establish and maintain additional development agreements or other alternative arrangements;
- the timing of, and the costs involved in, obtaining regulatory approvals;
- the cost of manufacturing activities;



- the cost of commercialization activities, including product marketing, sales and distribution;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other patent-related costs, including, if necessary, litigation costs and the results of such litigation; and
- potential acquisition or in-licensing of other products or technologies.

If we are unsuccessful in raising additional capital or other alternative financing, we might have to defer or abandon our efforts to commercialize the intellectual property obtained from FhCMB and cease operations.

***Our product development and commercialization involve a number of uncertainties, and we may never generate sufficient revenues from the sale of potential products to become profitable; therefore, we may raise funds which may be dilutive of our shareholders in the future.***

We have generated no significant revenues to date. To generate revenue and to achieve profitability, we must successfully develop licenses for our platform and/or clinically test, market and sell our potential products. Even if we generate revenue and successfully achieve profitability, we cannot predict the level of that profitability or whether it will be sustainable. We expect that our operating results will fluctuate from period to period as a result of differences in when we incur expenses and receive revenues from sales of our potential products, business arrangements and other sources. Some of these fluctuations may be significant.

Until we can generate a sufficient amount of license and/or product revenue, if ever, we expect to finance future cash needs through public or private equity offerings, debt financings and corporate product or technology development agreements and licensing arrangements. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve restrictive covenants. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences that are not favorable to us or our stockholders. If we raise additional funds through development and licensing arrangements with third parties, it will be necessary to relinquish valuable rights to our technologies, research programs or product candidates or grant licenses on terms that may not be favorable to us.

***Even if we or our potential licensees successfully complete clinical trials for our product candidates, there are no assurances that we will be able to submit, or obtain FDA approval of, a new drug application or biologics license application.***

There can be no assurance that, if clinical trials for any of our product candidates are successfully completed, we will be able to submit a biologics license application (BLA), to the FDA or that any BLA we submit will be approved by the FDA in a timely manner, if at all. After completing clinical trials for a product candidate in humans, a dossier is prepared and submitted to the FDA as a BLA, and includes all preclinical and clinical trial data that clearly establish both short-term and long-term safety for a product candidate, and data that establishes the statistically significant efficacy of a product candidate, in order to allow the FDA to review such dossier and to consider a product candidate for approval for commercialization in the United States. If we are unable to submit a BLA with respect to any of our product candidates, or if any BLA we submit is not approved by the FDA, we will be unable to commercialize that product. The FDA can and does reject BLAs and requires additional clinical trials, even when product candidates perform well or achieve favorable results in large-scale Phase 3 clinical trials. If we fail to commercialize any of our product candidates, we may be unable to generate sufficient revenues to continue operations or attain profitability and our reputation in the industry and in the investment community would likely be damaged, each of which would cause our stock price to significantly decrease.

***If commercialized, our product candidates may not be approved for sufficient governmental or third-party reimbursements, which would adversely affect our ability to market our product candidates.***

In the United States and elsewhere, sales of pharmaceutical products depend in significant part on the availability of reimbursement to the consumer from third-party payers, such as government and private insurance plans. Since we currently have no commercial products, we have not had to face this issue yet; however, third-party payers are increasingly challenging the prices charged for medical products and services. It will be time consuming and expensive for us to go through the process of seeking reimbursement from Medicaid, Medicare and private payers for any of our product candidates. Our products may not be considered cost effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis. The passage of the Medicare Prescription Drug and Modernization Act of 2003 imposes new requirements for the distribution and pricing of prescription drugs which may negatively affect the marketing of our potential products.

***We face competition from many different sources, including pharmaceutical and biotechnology enterprises, academic institutions, government agencies and private and public research institutions, and such competition may adversely affect our ability to generate revenue from our products.***

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, clinical trials, regulatory approvals and marketing approved products than we do. Several large pharmaceutical companies are currently already in the seasonal influenza vaccine business, and are likely to enter the market with new H1N1 vaccines produced with conventional technology. In addition, Protein Sciences Corporation was awarded a U.S. government contract to develop a new H1N1 vaccine based on its insect virus technology. Five injectable influenza vaccines are approved for use in the U.S. These include Afluria made by CSL Limited, Fluzone made by Sanofi-Pasteur, Fluarix made by GlaxoSmithKline, Flulaval made by ID Biomedical and distributed by GlaxoSmithKline, and Fluvirin made by Novartis. In addition, a nasally-administered influenza vaccine called FluMist is made by MedImmune. If we are successful in obtaining regulatory approval for our influenza vaccine candidate, we would have to compete against these large companies.

Smaller or early stage companies may also prove to be significant competitors, particularly through arrangements with large and established companies, and this may reduce the value of our platform technology for the purposes of establishing license agreements. For example, Novavax is developing vaccines for influenza, based on the use of cultured insect cells. Its candidate products are more advanced in development than ours are and have already demonstrated positive results in human clinical trials. Similarly, Medicago has announced preclinical experiments to produce influenza vaccines in green plants. Other companies, such as Vical, are attempting to develop vaccines based on the use of nucleic acids rather than proteins. If these efforts are successful in clinical trials, nucleic acid based vaccine products may compete effectively against our products and may potentially prevent us from being able to obtain commercial agreements or partnerships to enter the market.

There are currently approved therapies for the diseases and conditions addressed by our vaccine and antibody candidates that are undergoing clinical trials and for the diseases and conditions that are subjects of our preclinical development program. Our commercial opportunities will be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects or are less expensive than any products that we may develop. For example, the drugs oseltamivir, amantadine, and zanamivir are used to treat certain influenza infections, and Merck's vaccine to prevent HPV infection has been approved by the FDA with a similar vaccine developed by GlaxoSmithKline in late-stage development. There are also a number of companies working to develop new drugs and other therapies for diseases of commercial interest to us that are undergoing various stages of testing including clinical trials. The key competitive factors affecting the success of all of our product candidates are likely to be their efficacy, safety profile, price and convenience.

Finally, these third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business.

***We will depend significantly on arrangements with third parties to develop and commercialize our product candidates.***

A key element of our business strategy is to establish arrangements with licensees to develop and commercialize product candidates. We and FhCMB currently are working within our business structure, which includes non-commercial arrangements as described above, to apply further our plant-based platform technology. Delays, withdrawals or other adverse changes to the current participants in our business structure might adversely affect our ability to develop and commercialize our product candidates.

We expect to rely upon our future business arrangements for support in advancing certain of our drug candidates and intend to rely on additional work under current and future arrangements during our efforts to commercialize our product candidates. Our contractors may be conducting multiple product development efforts within the same disease areas that are the subjects of their agreements with us. Our agreements might not preclude them from pursuing development efforts using a different approach from that which is the subject of our agreement with them. Any of our drug candidates, therefore, may be subject to competition with a drug candidate under development by a contractor.

The success of our business arrangements will depend heavily on the efforts and activities of the organizations which are party to these arrangements. Our future contractual arrangements may provide significant discretion in determining the efforts and resources available to these programs. The risks that we face in connection with these arrangements, and that we anticipate being subject to in future arrangements, include the following:

- Future agreements may be for fixed terms and subject to termination under various circumstances, including, in some cases, on short notice without cause.
- Our future licensees may develop and commercialize, either alone or with others, products and services that are similar to or competitive with the products that are the subject of the agreement with us.
- Our future licensees may underfund or not commit sufficient resources to the testing, marketing, distribution or other development of our products.
- Our future licensees may not properly maintain or defend our intellectual property rights, or they may utilize our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential liability.
- Our future licensees may change the focus of their development and commercialization efforts. Pharmaceutical and biotechnology companies historically have re-evaluated their priorities from time to time, including following mergers and consolidations, which have been common in recent years in these industries. The ability of our product candidates and products to reach their potential could be limited if our licensees or customers decrease or fail to increase spending relating to such products.

Business arrangements with pharmaceutical companies and other third parties often are terminated or allowed to expire by the other party. Such terminations or expirations would adversely affect us financially and could harm our business reputation.

***We may not be successful in establishing additional arrangements with third parties, which could adversely affect our ability to discover, develop and commercialize products.***

We engaged FhCMB to perform research and development activities to apply our platform technology to create product candidates. We currently do not have other similar agreements with third parties. If we are able to obtain such agreements, however, these arrangements may not be scientifically or commercially successful. If we are unable to reach new agreements with suitable third parties, we may fail to meet our business objectives for the affected product or program. We face significant competition in seeking appropriate companies with which to create additional similar business structures. Moreover, these arrangements are complex to negotiate and time-consuming to document. We may not be successful in our efforts to establish additional alternative arrangements. The terms of any additional arrangements that we establish may not be favorable to us. Moreover, these arrangements may not be successful.

***If third parties on whom we will rely for clinical trials do not perform as contractually required or as we expect, we may not be able to obtain regulatory approval for or commercialize our product candidates, and our business may suffer.***

We do not have the ability to independently conduct the clinical trials required to obtain regulatory approval for our products. We have not yet contracted with any third parties to conduct our clinical trials. We will depend on independent clinical investigators, contract research organizations and other third party service providers to conduct the clinical trials of our product candidates and expect to continue to do so. We will rely heavily on these parties for successful execution of our clinical trials but will not control many aspects of their activities. For example, the investigators may not be our employees. However, we will be responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Third parties may not complete activities on schedule, or may not conduct our clinical trials in accordance with regulatory requirements or our stated protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates.

***We face substantial uncertainty in our ability to protect our patents and proprietary technology.***

Our ability to commercialize our products will depend, in part, on our or our licensors' ability to obtain patents, to enforce those patents and preserve trade secrets, and to operate without infringing on the proprietary rights of others.

The patent positions of biotechnology companies like us are highly uncertain and involve complex legal and factual questions. To date, we have 17 U.S. applications pending and 93 applications pending in Europe, Canada, Australia, China, India, Brazil, Japan, Hong Kong and New Zealand for the intellectual property developed by FhCMB. There can be no assurance that:

- patent applications owned by or licensed to us will result in issued patents;

- patent protection will be secured for any particular technology;
- any patents that have been or may be issued to us will be valid or enforceable;
- any patents will provide meaningful protection to us;
- others will not be able to design around the patents; or
- our patents will provide a competitive advantage or have commercial application.

The failure to obtain and maintain adequate patent protection would have a material adverse effect on us and may adversely affect our ability to enter into, or affect the terms of, any arrangement for the marketing of any product. Please see “Description of Our Business – Intellectual Property” in our Annual Report on Form 10-K for more information.

***We cannot assure you that our patents will not be challenged by others.***

There can be no assurance that patents owned by or licensed to us will not be challenged by others. We currently hold one issued U.S. patent for methods of inducing gene silencing in plants and one U.S. patent application for which we have received a notice of allowance, describing systems for expression of vaccine antigens in plants. Please see “Description of Our Business – Intellectual Property” in our Annual Report on Form 10-K for more information on our current patents and patent applications. We could incur substantial costs in proceedings, including interference proceedings before the United States Patent and Trademark Office and comparable proceedings before similar agencies in other countries in connection with any claims that may arise in the future. These proceedings could result in adverse decisions about the patentability of our or our licensors’ inventions and products, as well as about the enforceability, validity or scope of protection afforded by the patents. Any adverse decisions about the patentability of our product candidates could cause us to either lose rights to develop and commercialize our product candidates or to license such rights at substantial cost to us. In addition, even if we were successful in such proceedings, the cost and delay of such proceedings would most likely have a material adverse effect on our business.

***Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information, may not adequately protect our intellectual property, and will not prevent third parties from independently discovering technology similar to or in competition with our intellectual property.***

We rely on trade secrets and other unpatented proprietary information in our product development activities. To the extent we rely on trade secrets and unpatented know-how to maintain our competitive technological position, there can be no assurance that others may not independently develop the same or similar technologies. We seek to protect trade secrets and proprietary knowledge, in part, through confidentiality agreements with our employees, consultants, advisors, collaborators and contractors. Nevertheless, these agreements may not effectively prevent disclosure of our confidential information and may not provide us with an adequate remedy in the event of unauthorized disclosure of such information. If our employees, scientific consultants, advisors, collaborators or contractors develop inventions or processes independently that may be applicable to our technologies, product candidates or products, disputes may arise about ownership of proprietary rights to those inventions and processes. Such inventions and processes will not necessarily become our property, but may remain the property of those persons or their employers. Protracted and costly litigation could be necessary to enforce and determine the scope of our proprietary rights. If we fail to obtain or maintain trade secret protection for any reason, the competition we face could increase, reducing our potential revenues and adversely affecting our ability to attain or maintain profitability.

***If we infringe or are alleged to infringe intellectual property rights of third parties, it will adversely affect our business.***

Our research, development and commercialization activities, as well as any products candidates or products resulting from these activities, may infringe or be claimed to infringe patents or patent applications under which we do not hold licenses or other rights. Third parties may own or control these patents and patent applications in the United States and abroad. These third parties could bring claims against us or our customers, collaborators or licensees that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us or our collaborators, we or they could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit.

As a result of patent infringement claims, or in order to avoid potential claims, we or our customers, collaborators or licensees may choose to seek, or be required to seek, a license from the third party and would most likely be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we or our customers,

collaborators or licensees were able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations if, as a result of actual or threatened patent infringement claims, we or our customers, collaborators or licensees are unable to enter into licenses on acceptable terms. This could harm our business significantly.

There have been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical and biotechnology industries. In addition to infringement claims against us, we may become a party to other patent litigation and other proceedings, including interference proceedings declared by the United States Patent and Trademark Office and opposition proceedings in the European Patent Office, regarding intellectual property rights with respect to our products and technology. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

***There is a substantial risk of product liability claims in our business. If we are unable to obtain sufficient insurance, a product liability claim against us could adversely affect our business.***

Clinical trial and product liability insurance is volatile and may become increasingly expensive. As a result, we may be unable to obtain sufficient insurance or increase our existing coverage at a reasonable cost to protect us against losses that could have a material adverse effect on our business. An individual may bring a product liability claim against us if one of our products or product candidates causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any product liability claim brought against us, with or without merit, could result in:

- liabilities that substantially exceed our product liability insurance, which we would then be required to pay from other sources, if available;
- an increase of our product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, or at all;
- withdrawal of clinical trial volunteers or patients;
- damage to our reputation and the reputation of our products, resulting in lower sales of any future commercialized product which we may have;
- regulatory investigations that could require costly recalls or product modifications;
- litigation costs; or
- the diversion of management's attention from managing our business.

Our inability to obtain adequate insurance coverage at an acceptable cost could prevent or inhibit the commercialization of our products. If third parties were to bring a successful product liability claim or series of claims against us for uninsured liabilities or in excess of insured liability limits, our business, financial condition and results of operations could be materially harmed.

***The agreements we entered into with Integrated BioPharma in connection with the distribution could restrict our operations.***

In connection with the distribution, we and Integrated BioPharma entered into a number of agreements that govern our spin-off from Integrated BioPharma and our future relationship. Each of these agreements were entered into in the context of our relationship to Integrated BioPharma as a subsidiary and our spin-off from Integrated BioPharma and, accordingly, the terms and provisions of these agreements may be less favorable to us than terms and provisions we could have obtained in arm's-length negotiations with unaffiliated third parties. These agreements commit us to take actions, observe commitments and accept terms and conditions that are or may be advantageous to Integrated BioPharma but are or may be disadvantageous to us. The terms of these agreements include obligations and restrictive provisions, including, but not limited to:

- an agreement to indemnify Integrated BioPharma, its affiliates, and each of their respective directors, officers, employees, agents and representatives from certain liabilities arising out of any litigation we are involved in and all liabilities that arise from our breach of, or performance under, the agreements we are entering into with Integrated BioPharma in connection with the distribution and for any of our liabilities; and
- an agreement with regard to tax matters between ourselves and Integrated BioPharma which restricts our ability to engage in certain strategic or capital raising transactions.

***Current economic conditions may cause a decline in business and consumer spending which could adversely affect our business and financial performance.***

Our operating results are impacted by the health of the North American economies. Our business and financial performance, including collection of our accounts receivable, recoverability of assets including investments, may be adversely affected by current and future economic conditions, such as a reduction in the availability of credit, financial market volatility, recession, etc. Additionally, we may experience difficulties in scaling our operations to react to economic pressures in the U.S.

#### **Risks Relating to our Common Stock**

***We may need additional capital in the future which may not be available on commercially acceptable terms, if at all.***

We have limited financial resources and incurred net losses during the fiscal years ended June 30, 2009 and June 30, 2008. We may need to obtain additional debt or equity funding to finance our working capital needs. If we are unable to identify a source of capital on acceptable terms, or at all, our business, financial condition and liquidity will be negatively affected.

***Our future results may vary significantly in the future which may adversely affect the price of our common stock.***

It is possible that our quarterly revenues and operating results may vary significantly in the future and that period-to-period comparisons of our revenues and operating results are not necessarily meaningful indicators of the future. You should not rely on the results of one quarter as an indication of our future performance. It is also possible that in some future quarters, our revenues and operating results will fall below our expectations or the expectations of market analysts and investors. If we do not meet these expectations, the price of our common stock may decline significantly.

***Our common stock is considered “a penny stock” and may be difficult to sell.***

The SEC has adopted regulations which generally define “penny stock” to be an equity security that has a market price of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to specific exemptions. As the market price of our common stock has been less than \$5.00 per share, our common stock is considered a “penny stock” according to SEC rules. This designation requires any broker or dealer selling these securities to disclose certain information concerning the transaction, obtain a written agreement from the purchaser and determine that the purchaser is reasonably suitable to purchase the securities. These rules may restrict the ability of brokers or dealers to sell our common stock and may affect the ability of investors to sell their shares. In addition, since our common stock is currently traded on the OTC Bulletin Board, investors may find it difficult to obtain accurate quotations for our common stock and may experience a lack of buyers to purchase such stock or a lack of market makers to support the stock price.

***Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable.***

Provisions of our certificate of incorporation, bylaws and provisions of applicable Delaware law may discourage, delay or prevent a merger or other change in control that a stockholder may consider favorable. Pursuant to our certificate of incorporation, our board of directors may issue additional shares of common or preferred stock. Any additional issuance of common stock could have the effect of impeding or discouraging the acquisition of control of us by means of a merger, tender offer, proxy contest or otherwise, including a transaction in which our stockholders would receive a premium over the market price for their shares, and thereby protects the continuity of our management. Specifically, if in the due exercise of his/her or its fiduciary obligations, the board of directors were to determine that a takeover proposal was not in our best interest, shares could be issued by our board of directors without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover by:

- diluting the voting or other rights of the proposed acquirer or insurgent stockholder group,

- putting a substantial voting block in institutional or other hands that might undertake to support the incumbent board of directors, or
- effecting an acquisition that might complicate or preclude the takeover.

Our certificate of incorporation also allows our board of directors to fix the number of directors in the by-laws. Cumulative voting in the election of directors is specifically denied in our certificate of incorporation. The effect of these provisions may be to delay or prevent a tender offer or takeover attempt that a stockholder may determine to be in his, her or its best interest, including attempts that might result in a premium over the market price for the shares held by the stockholders.

We also are subject to Section 203 of the Delaware General Corporation Law. In general, these provisions prohibit a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless the transaction in which the person became an interested stockholder is approved in a manner presented in Section 203 of the Delaware General Corporation Law. Generally, a “business combination” is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years, did own, 15% or more of a corporation’s voting stock. This statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us.

***We do not anticipate paying cash dividends for the foreseeable future, and therefore investors should not buy our stock if they wish to receive cash dividends.***

We have never declared or paid any cash dividends or distributions on our capital stock. We currently intend to retain our future earnings to support operations and to finance expansion and therefore we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

***A significant number of our shares will be eligible for sale and their sale or potential sale may depress the market price of our common stock.***

Sales of a significant number of shares of our common stock in the public market could harm the market price of our common stock. This prospectus covers 9,657,476 shares of our common stock, including shares of our common stock underlying currently outstanding warrants, which, if such warrants were exercised, would represent approximately 31% of our outstanding shares of our common stock. As additional shares of our common stock become available for resale in the public market pursuant to this offering, and otherwise, the supply of our common stock will increase, which could decrease its price. Some or all of the shares of common stock may be offered from time to time in the open market pursuant to Rule 144, and these sales may have a depressive effect on the market for our shares of common stock. Subject to certain restrictions, a person who has held restricted shares for a period of six months may sell common stock into the market.

#### **FORWARD-LOOKING STATEMENTS**

This prospectus contains forward-looking statements that involve risks and uncertainties. These forward-looking statements are not historical facts but rather are plans and predictions based on current expectations, estimates and projections about our industry, our beliefs and assumptions. We use words such as “anticipate,” “expect,” “intend,” “plan,” “believe,” “seek,” “estimate” and variations of these words and similar expressions to identify forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, some of which are beyond our control, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. These risks and uncertainties include those described in the section above entitled “Risk Factors.” You should not place undue reliance on these forward-looking statements, which reflect our view only as of the date of this prospectus.

#### **USE OF PROCEEDS**

We will not receive any of the proceeds from the sale of the shares of common stock because they are being offered by the selling stockholders. We are not offering any shares for sale under this prospectus. However, we will receive the proceeds from any exercise of the warrants, which would be used for general corporate and working capital purposes.

## SELLING STOCKHOLDERS

The following table sets forth the name of each of the selling stockholders, the number of shares beneficially owned by each of the selling stockholders as of October 7, 2009, the number of shares that may be offered under this prospectus and the number of shares of our common stock owned by each of the selling stockholders after the offering is completed. The information concerning the selling stockholders may change from time to time, which changed information will be set forth in supplements to this prospectus if and when necessary. Because the selling stockholders may offer all or some of the common stock held, we can only give an estimate as to the amount of common stock that will be held by the selling stockholders upon the termination of this offering.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting and investment power with respect to securities. To our knowledge, except as set forth in the footnotes to this table and subject to applicable community property laws, each person named in this table has sole voting and investment power with respect to the shares shown as beneficially owned by him or her.

As of October 7, 2009, 27,972,904 shares of our common stock were outstanding. In computing the number of shares beneficially owned by a person and the percentage of ownership of that person, shares of common stock issuable upon the exercise of warrants and options that are currently exercisable or exercisable within 60 days of October 7, 2009, are deemed to be outstanding and beneficially owned by the person holding the options, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Under this prospectus, the selling stockholders and any of their respective transferees, assignees, donees, distributees, pledgees or other successors in interest to the common stock covered by this prospectus may offer and sell from time to time an aggregate of up to 9,657,476 shares of common stock.

On September 10, 2009, the Company entered into a subscription agreement with accredited investors pursuant to which such investors purchased an aggregate of approximately 4,615,385 shares of common stock of the Company at a purchase price of \$0.65 per share, for gross proceeds of approximately \$3,000,000 (the "Private Placement"). The Company is registering the shares of common stock for the Private Placement investors identified in the selling stockholder table pursuant to a registration rights agreement with the investors to (i) file a shelf registration statement with respect to the resale of shares of the common stock sold to the investors with the Securities and Exchange Commission within 30 days after the closing date of September 10, 2009; (ii) use its reasonable best efforts to have the shelf registration statement declared effective by the Commission as soon as possible after the initial filing; and (iii) use its reasonable best efforts to keep the shelf registration statement effective until the earlier of the time when all shares registered thereunder have been sold or the shares covered by the shelf registration statement may be sold without volume restrictions pursuant to Rule 144 (the "Registration Rights Agreement").

Certain selling stockholders including Nico Pronk, Wayne Horne, Eric Moquist and Shawn Titcomb are affiliates of Noble Financial Capital Markets, Inc. and Noble International Investments, Inc., a FINRA registered broker-dealer (the "Placement Agent") which served as the Placement Agent in the Private Placement. Under the terms of the Placement Agent's one year agreement with the Company on July 13, 2009 (the "Placement Agency Agreement"), the Placement Agent is entitled to receive 7% of the aggregate gross proceeds received from a sale of equity or equity-linked securities in the Private Placement. Additionally, the Placement Agent is entitled to purchase, for \$.0001 each, cashless exercise warrants to purchase common stock of the Company equal to the aggregate gross proceeds received from a sale of securities divided by the Company's closing stock price at each Private Placement closing multiplied by 7% for equity or equity-linked securities. The warrants granted to the Placement Agent have a term of five years and have an exercise price equal to 100% of the Company's closing stock price at each closing of the Private Placement. The warrants are transferable to the Placement Agent's employees and affiliates. The Placement Agent received one time piggyback registration rights with respect to the securities underlying its warrants. The Placement Agency Agreement additionally provides to the extent that any investors participating in a closing are existing security-holders of the Company or were introduced to the Company by one or more of the Company's officers, directors or stockholders resulting in aggregate gross proceeds to the Company of up to \$2,000,000, the fee payable to the Placement Agent with respect to such investors will be 50% of the fee (both cash and warrants) otherwise payable in accordance with the above terms.

The Company agreed to reimburse the Placement Agent upon demand (accompanied by reasonable supporting documentation), up to a maximum of \$10,000 for the reasonable expenses of the Placement Agent incurred in connection with its acting as Placement Agent under the Placement Agency Agreement.

The Placement Agent also entered into a one year financial advisory agreement with the Company on July 13, 2009 (the "Advisory Agreement"). The Advisory Agreement provides the Placement Agent is entitled to a financial advisory fee of \$10,000 cash for each month during the term of the Advisory Agreement payable in consecutive monthly installments during the term, plus five year cash warrants to purchase 100,000 shares of the Company's (or its successor's) common stock, exercisable at \$0.35 per share. The warrants granted under the Advisory Agreement will be transferable to Placement Agent's employees and affiliates and carry one-time piggyback registration rights with respect to the common stock underlying such warrants.



There are currently no agreements, arrangements or understandings with respect to the sale of any of the resale shares held by the selling stockholders, except for that certain Registration Rights Agreement, between the Company and certain of the selling stockholders enumerated below, each dated September 10, 2009, the Placement Agency Agreement and the Advisory Agreement.

Name	Shares of Common Stock Beneficially Owned Before the Offering	Shares of Common Stock Registered in this Offering	Shares of Common Stock Owned After Offering	Percentage of Outstanding Common Stock Beneficially Owned After the Offering
Lance Baller	153,846	153,846	-0-	*
Jeffrey Benison	77,000	77,000	-0-	*
T. Wayne Davis	121,980	121,980	-0-	*
Nick DeVito	153,846	153,846	-0-	*
Bob Dougherty	300,000	300,000	-0-	*
John Joseph Flanagan, Jr.	619,150	619,150	-0-	*
Larry J. Fox	287,660	287,660	-0-	*
Downing Gray	100,000	100,000	-0-	*
Robert K. Hoecker	93,830	93,830	-0-	*
Mark Horan	46,914	46,914	-0-	*
Lynn Horne	50,000	50,000	-0-	*
Wayne Horne (1)	520,153	520,153	-0-	*
David H. Hughes	193,830	193,830	-0-	*
Keith Jones	15,385	15,385	-0-	*
Bradley Karro	192,308	192,308	-0-	*
Cheryl A.G. Kozloff Revocable Trust (2)	187,660	187,660	-0-	*
Charles Kozloff	366,346	366,346	-0-	*
Zarko Kraljevic	943,550	938,300	5,250	*
Gary McAdams	115,385	115,385	-0-	*
Candace McKey	140,746	140,746	-0-	*
John D. McKey, Jr.	536,924	528,406	8,518	*
McNamara Limited Partnership	150,000	150,000	-0-	*
McNamara of New Smyrna LP (3)	118,830	93,830	25,000	*
McNamara of Orlando LP (4)	93,830	93,830	-0-	*
Dennis C. McNamara, Sr., F.L.P.	243,830	243,830	-0-	*
Hal McNamara	100,000	100,000	-0-	*
Erik Moquist (1)	76,923	76,923	-0-	*
Noble Financial Capital Markets (5)	350,587	350,587	-0-	*
OPB Limited Partnership (6)	844,470	844,470	-0-	*
George H. Patten Pettway, Jr.	18,766	18,766	-0-	*

Name	Shares of Common Stock Beneficially Owned Before the Offering	Shares of Common Stock Registered in this Offering	Shares of Common Stock Owned After Offering	Percentage of Outstanding Common Stock Beneficially Owned After the Offering
George H. Pettway	234,576	234,576	-0-	*
Jeff P. Ploen	153,846	153,846	-0-	*
Nico Pronk (1)	520,153	520,153	-0-	*
Rheney Living Trust (7)	93,830	93,830	-0-	*
Clark Rheney	100,000	100,000	-0-	*
Charles Seergy, Jr.	117,288	117,288	-0-	*
Treadway Shurling	193,830	193,830	-0-	*
Kevin Smith	117,288	117,288	-0-	*
Paul Stevenson	307,692	307,692	-0-	*
J. Yancey Stribling, Jr.	193,830	193,830	-0-	*
TH Capital Holdings, LLC (8)	187,660	187,660	-0-	*
Shawn Titcomb (1)	100,000	100,000	-0-	*

\* less than 1%

- (1) A principal or affiliate of the Placement Agent (see note 5 below)
- (2) Cheryl A.G. Kozloff is the trustee of Cheryl A.G. Kozloff Revocable Trust, which is the registered holder of the shares of common stock. Cheryl A.G. Kozloff, as trustee of Cheryl A.G. Kozloff Revocable Trust, has voting and disposition power over the shares owned by Cheryl A.G. Kozloff Revocable Trust.
- (3) Dennis C. McNamara, Jr. is the general partner of McNamara of New Smyrna LP, which is the registered holder of the shares of common stock. Dennis C. McNamara, Jr., as general partner of McNamara of New Smyrna LP, has voting and disposition power over the shares owned by McNamara of New Smyrna LP.
- (4) Hal McNamara is the general partner of McNamara of Orlando LP, which is the registered holder of the shares of common stock. Hal McNamara, as general partner of McNamara of Orlando LP, has voting and disposition power over the shares owned by McNamara of Orlando LP.
- (5) Noble Financial Capital Markets, Inc. and Noble International Investments, Inc., a FINRA registered broker-dealer, served as the Placement Agent in the Private Placement.
- (6) Bradley Hoecker is the general partner of OPB Limited Partnership, which is the registered holder of the shares of common stock. Bradley Hoecker, as general partner of OPB Limited Partnership, has voting and disposition power over the shares owned by OPB Limited Partnership.
- (7) Samuel Clarke Rheney, Jr. is the trustee of Rheney Living Trust, which is the registered holder of the shares of common stock. Samuel Clarke Rheney, Jr., as trustee of Rheney Living Trust, has voting and disposition power over the shares owned by Rheney Living Trust.
- (8) Michael Cirillo is the vice president of TH Capital Holdings, LLC, which is the registered holder of the shares of common stock. Michael Cirillo, as vice president of TH Capital Holdings, LLC, has voting and disposition power over the shares owned by TH Capital Holdings, LLC.

## PLAN OF DISTRIBUTION

The selling stockholders and any of their pledgees, donees, transferees, assignees and successors-in-interest may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits investors;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- an underwritten offering;
- privately negotiated transactions;
- to cover short sales made after the date that this Registration Statement is declared effective by the Commission;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common stock from time to time under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

Upon our being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such the shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon our being notified in writing by a selling stockholder that a donee or pledgee intends to sell more than 500 shares of common stock, a supplement to this prospectus will be filed if then required in accordance with applicable securities law.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Discounts, concessions, commissions and similar selling expenses, if any, that can be attributed to the sale of Securities will be paid by the selling stockholder and/or the purchasers. Each Selling Stockholder has represented and warranted to us that it acquired the securities subject to this registration statement in the ordinary course of such selling stockholder’s business and, at the time of its purchase of such securities such selling stockholder had no agreements or understandings, directly or indirectly, with any person to distribute any such securities.

We have advised each selling stockholder that it may not use shares registered on this Registration Statement to cover short sales of common stock made prior to the date on which this Registration Statement shall have been declared effective by the Commission. If a selling stockholder uses this prospectus for any sale of the common stock, it will be subject to the prospectus delivery requirements of the Securities Act. The selling stockholders will be responsible to comply with the applicable provisions of the Securities Act and Exchange Act, and the rules and regulations thereunder promulgated, including, without limitation, Regulation M, as applicable to such selling stockholders in connection with resales of their respective shares under this Registration Statement.

We are required to pay all fees and expenses incident to the registration of the shares, but we will not receive any proceeds from the sale of the common stock. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

## LEGAL MATTERS

The legality of the securities offered hereby has been passed on for us by Davis Wright Tremaine LLP, New York, New York.

## EXPERTS

The financial statements of iBio, Inc. (formerly iBioPharma, Inc.) as of June 30, 2009 and 2008, and for each of the years then ended, included in this prospectus, have been audited by Amper, Politziner & Mattia, LLP, independent registered public accountants, as stated in their report incorporated by reference in this registration statement, and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Amper, Politziner & Mattia, LLP has consented to the use of its name and statements with respect to it appearing in this prospectus.

## MATERIAL CHANGES

There have been no material changes in our affairs which have occurred since the end of the latest fiscal year for which audited financial statements were included in the latest Form 10-K and that have not been described in a Form 10-Q or Form 8-K filed under the Exchange Act.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with them, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus. We incorporate by reference the documents listed below:

- Our Annual Report on Form 10-K for the year ended June 30, 2009 filed on September 28, 2009; and
- Our Registration Statement on Form S-1 filed on April 24, 2009.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement but not delivered with the prospectus. We will provide these reports or documents upon written or oral request and at no cost to the requester. Requests for this information must be made to our president Robert Erwin, located at 9 Innovation Way, Suite 100, Newark, Delaware 19711, by telephone at (302) 355-2335, or by email at [rerwin@ibioinc.com](mailto:rerwin@ibioinc.com). The address of our website is <http://www.ibioinc.com>.

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Securities Exchange Act of 1934. Any materials that we file with the SEC may be read and copied by the public at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements and other information about issuers, like us, that file electronically with the SEC. The address of the SEC’s web site is <http://www.sec.gov>.

# PROSPECTUS

## IBIO, INC.

9,657,476 Shares of Common Stock

, 2009

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## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses that will be paid by us in connection with the securities being registered. With the exception of the SEC registration fee, all amounts shown are estimates:

Registration Fees	\$ 327.81
Federal Taxes	
State Taxes	
Legal Fees and Expenses	
Printing and Engraving Expenses	
Blue Sky Fees	
Accounting Fees and Expenses	
Miscellaneous	
	_____
Total	\$ _____

We will pay all expenses incurred in connection with the registration of the shares covered by this prospectus. Brokerage commissions, underwriters' fees, discounts and commissions and similar selling expenses, if any, attributable to the sale of the shares covered by this prospectus will be borne by the selling stockholders.

#### Item 14. Indemnification of Directors and Officers.

Our Certificate of Incorporation will provide for indemnification of our officers and directors to the extent permitted by Delaware law, which generally permits indemnification for actions taken by officers or directors as our representatives if the officer or director acted in good faith and in a manner he or she reasonably believed to be in the best interest of the corporation. We have entered into indemnification agreements with our officers and directors to specify the terms of our indemnification obligations. In general, these indemnification agreements provide that we will:

- indemnify our directors and officers to the fullest extent now permitted under current law and to the extent the law later is amended to increase the scope of permitted indemnification;
- advance payment of expenses to a director or officer incurred in connection with an indemnifiable claim, subject to repayment if it is later determined that the director or officer was not entitled to be indemnified;
- reimburse the director or officer for any expenses incurred by the director or officer in seeking to enforce the indemnification agreement; and
- have the opportunity to participate in the defense of any indemnifiable claims against the director or officer.

As permitted under Delaware law, the By-laws contain a provision indemnifying directors against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by them in connection with an action, suit or proceeding if they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of our Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful.

The separation and distribution agreement that we have entered into with Integrated BioPharma provides for indemnification by us of Integrated BioPharma and its directors, officers and employees for some liabilities, including liabilities under the Securities Act and the Securities Exchange Act of 1934 in connection with the distribution, and a mutual indemnification of each other for product liability claims arising from their respective businesses, and also requires that we indemnify Integrated BioPharma for various liabilities of iBio, and for any tax that may be imposed with respect to the distribution and which result from our actions or omissions in that regard.

## Item 15. Recent Sales of Unregistered Securities

### Conversion of Debt

On August 19, 2008, we entered into a Conversion Agreement (the "Conversion Agreement") with Integrated BioPharma, Inc. ("Integrated BioPharma") pursuant to which we (i) converted \$2,700,000 of inter-company debt owed to Integrated BioPharma into 1,266,706 shares of our common stock; and (ii) contributed \$5,177,097 into additional paid-in capital.

The common stock issued to Integrated BioPharma pursuant to the terms of the Conversion Agreement was issued and sold in reliance upon the exemption from registration contained in Section 4(2) of the Securities Act and Regulation D promulgated thereunder. These securities may not be offered or sold in the United States in the absence of an effective registration statement or exemption from the registration requirements under the Securities Act.

### 2008 Private Placement

On August 19, 2008, we entered into a Securities Purchase Agreement with accredited investors pursuant to which such investors purchased an aggregate of 2,345,752 shares of our common stock at a purchase price of \$2.13 per share, for gross proceeds of \$5,000,000. As part of the private placement, each investor was issued two five-year warrants, each to purchase 50% of the number of shares of common stock such investor purchased in the private placement. One warrant has an exercise price of 150% of the per share purchase price of the common stock in the private placement, and the other warrant has an exercise price of 200% of the per share purchase price of the common stock in the private placement.

We agreed pursuant to the terms of the subscription documents with the investors to (i) file a shelf registration statement with respect to the resale of shares of the common stock sold to the investors and the shares of our common stock issuable upon exercise of the warrants with the Commission within 180 days after the closing date of August 19, 2008; (ii) use reasonable efforts to have the shelf registration statement declared effective by the Commission as promptly as possible after the initial filing; (iii) use reasonable efforts to keep the shelf registration statement effective until the earlier of the time when all securities registered thereunder have been sold or the securities covered by the shelf registration statement may be sold without volume restrictions pursuant to Rule 144(k) of the Securities Act.

The common stock, warrants and common stock issuable upon exercise of the warrants were issued and sold in reliance upon the exemption from registration contained in Section 4(2) of the Securities Act and Regulation D promulgated thereunder. These securities may not be offered or sold in the United States in the absence of an effective registration statement or exemption from the registration requirements under the Securities Act.

### 2009 Private Placement

On September 10, 2009, we entered into a Subscription Agreement with accredited investors pursuant to which such investors purchased an aggregate of approximately 4,615,385 shares of our common stock at a purchase price of \$0.65 per share, for gross proceeds of approximately \$3,000,000.

We agreed pursuant to the terms of a Registration Rights Agreement with the investors to (i) file a shelf registration statement with respect to the resale of shares of the common stock sold to the investors with the Commission within 30 days after the closing date of September 10, 2009; (ii) use reasonable best efforts to have the shelf registration statement declared effective by the Commission as soon as possible after the initial filing; and (iii) use reasonable best efforts to keep the shelf registration statement effective until the earlier of the time when all shares registered thereunder have been sold or the shares covered by the shelf registration statement may be sold without volume restrictions pursuant to Rule 144 of the Securities Act.

The common stock was issued and sold in reliance upon the exemption from registration contained in Section 4(2) of the Securities Act and Regulation D promulgated thereunder. These shares may not be offered or sold in the United States in the absence of an effective registration statement or exemption from the registration requirements under the Securities Act.

## Item 16. Exhibits

Exhibits filed with this Registration Statement on Form S-1 or incorporated by reference from other filings are as follows:

<u>Number</u>	<u>Description</u>
3.1	Form of Articles of Incorporation of iBio, Inc. (3)



- 3.2 Form of Bylaws of iBio, Inc. (9)
- 4.1 Form of Common Stock Certificate (3)
- 4.2 Form of Warrant to Purchase Common Stock of iBio, Inc. for each Investor (5)
- 5.1 Opinion of Davis Wright Tremaine LLP (10)
- 10.1 Separation and Distribution Agreement, dated as of November 14, 2007, between Integrated BioPharma, Inc. and the Registrant. (1)
- 10.2 Indemnification and Insurance Matters Agreement between Integrated BioPharma, Inc., and the Registrant (5)
- 10.3 Transitional Services Agreement between Integrated BioPharma, Inc. and the Registrant. (5)
- 10.4 Tax Allocation Agreement between Integrated BioPharma, Inc. and the Registrant. (5)
- 10.5 Form of Securities Purchase Agreement between various purchasers and the Registrant. (6)
- 10.6 Technology Transfer Agreement, dated as of January 1, 2004, between the Registrant and Fraunhofer USA Center for Molecular Biotechnology, Inc. (3)
- 10.7 Non-Standard Navy Cooperative Research and Development Agreement, dated August 17, 2004, between the Registrant and Fraunhofer USA Center for Molecular Biotechnology, Inc. (2)
- 10.8 Supply License Agreement, dated as of March 22, 2006, between the Registrant and Mannatech, Inc. (2)
- 10.9 Form of Registration Rights Agreement with iBio, Inc. for each Investor. (6)
- 10.10 Conversion Agreement, dated August 19, 2008, by and between iBio, Inc. and Integrated BioPharma, Inc. (6)
- 10.11 Form of Subscription Agreement between various purchasers and the Registrant. (7)
- 10.12 Form of Registration Rights Agreement with iBio, Inc. for each purchaser. (7)
- 21.1 Subsidiaries of the Registrant (8)
- 23.1 Consent of Amper, Politziner & Mattia, LLP (10)
- 23.2 Consent of Davis Wright Tremaine LLP (included in Exhibit 5.1)
- 24.1 Power of Attorney (included in the signature page of this Registration Statement)

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- (1) Incorporated herein by reference to the Company's Form 10-12G filed with the Commission on March 7, 2008
  - (2) Incorporated herein by reference to the Company's Form 10-12G filed with the Commission on June 18, 2008
  - (3) Incorporated herein by reference to the Company's Form 10-12G filed with the Commission on July 11, 2008
  - (4) Incorporated herein by reference to the Company's Form 10-12G filed with the Commission on July 17, 2008
  - (5) Incorporated herein by reference to the Company's Current Report on Form 8-K filed with the SEC on August 12, 2008.
  - (6) Incorporated herein by reference to the Company's Current Report on Form 8-K filed with the SEC on August 19, 2008.
  - (7) Incorporated herein by reference to the Company's Current Report on Form 8-K filed with the SEC on September 15, 2009.
  - (8) Incorporated herein by reference to the Company's Annual Report on Form 10-K for the year ended June 30, 2009
  - (9) Incorporated herein by reference to the Company's Current Report on Form 8-K filed with the SEC on August 14, 2009.
  - (10) Filed herewith.

**Item 17. Undertakings.**

(a) We hereby undertake:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) to include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
- (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a

fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

- (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, iBio, Inc. has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Newark, Delaware, on October 9, 2009.

IBIO, INC.

By: /s/ Robert B. Kay

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Robert B. Kay  
Chief Executive Officer

## POWER OF ATTORNEY

We, the undersigned officers and directors of the Registrant, iBio, Inc., a Delaware corporation, hereby severally and individually constitute and appoint Robert B. Kay, Chief Executive Officer and Frederick Larcombe, Chief Financial Officer, and each of them, as true and lawful attorneys in fact for the undersigned, in any and all capacities, with full power of substitution, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys in fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys in fact, or any of them, may lawfully do or cause to be done by virtue of this appointment.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Robert B. Kay</u> Robert B. Kay	Chief Executive Officer and Director (Principal Executive Officer)	October 9, 2009
<u>/s/ Frederick Larcombe</u> Frederick Larcombe	Chief Financial Officer (Principal Financial and Accounting Officer)	October 9, 2009
<u>/s/ James T. Hill</u> General James T. Hill (Ret.)	Director	October 9, 2009
<u>/s/ Glenn Chang</u> Glenn Chang	Director	October 9, 2009
<u>/s/ John D. McKey, Jr.</u> John D. McKey, Jr.	Director	October 9, 2009

**DAVIS WRIGHT TREMAINE LLP**

1633 Broadway  
New York, New York 10019

October 9, 2009

iBio, Inc.  
9 Innovation Way, Suite 100  
Newark, Delaware 19711

Dear Sirs:

We are acting as counsel to iBio, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-1 filed on October 9, 2009 (as it may be amended, the "Registration Statement"), under the Securities Act of 1933, as amended (the "Act"), covering 9,657,476 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), which are being registered in connection with the proposed sale of the shares of Common Stock by the selling stockholders listed therein. Of the shares of Common Stock so registered, 6,961,137 shares are currently issued and outstanding, and 2,696,339 are issuable upon exercise of warrants to purchase shares of Common Stock (the "Warrants").

We have examined the originals, or certified, conformed or reproduction copies, of all such records, agreements, instruments and documents as we have deemed relevant or necessary as the basis for the opinion hereinafter expressed. In all such examinations, we have assumed the genuineness of all signatures on originals or certified copies and the conformity to original or certified copies of all copies submitted to us as conformed or reproduction copies. As to various questions of fact relevant to such opinion, we have relied upon, and assumed the accuracy of, certificates and oral or written statements and other information of or from public officials, officers or representatives of the Company, and others.

Based upon the foregoing, and the laws of the State of Delaware, we are of the opinion that (i) the issued and outstanding shares of Common Stock covered by the Registration Statement are legally issued, fully paid, non-assessable and binding obligations of the Company under the laws of the State of Delaware, and (ii) the shares of Common Stock issuable upon exercise of the outstanding Warrants covered by the Registration Statement have been duly authorized, and, when issued, delivered and paid for in accordance with the terms and conditions of the instruments governing their issuance, will be legally issued, fully paid, non-assessable and binding obligations of the Company under the laws of the State of Delaware.

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We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the prospectus forming a part of the Registration Statement.

Very truly yours,

/s/ Davis Wright Tremaine LLP  
DAVIS WRIGHT TREMAINE LLP

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**Consent of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders of iBio, Inc.:

We hereby consent to the incorporation by reference and use in this Prospectus constituting a part of the Registration Statement of iBio, Inc. (formerly iBioPharma, Inc.) on Form S-1 of our report dated September 28, 2009, appearing in the Annual Report on Form 10-K of iBio, Inc. as of and for the year ended June 30, 2009.

We also consent to the reference to us under the heading “Experts” in such Prospectus constituting a part of the Registration Statement.

/s/ Amper, Politziner & Mattia, LLP

Edison, New Jersey  
October 9, 2009

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