ARQULE INC Form DEF 14A April 14, 2008

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.

Filed by the Registrant ý

Filed by a Party other than the Registrant o

Check the appropriate box:

- o Preliminary Proxy Statement
- O Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- ý Definitive Proxy Statement
- o Definitive Additional Materials
- o Soliciting Material Pursuant to §240.14a-12

ArQule, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- ý No fee required.
- o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
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Dear Stockholders,

The past year has been one of significant progress and transition at ArQule. Several years ago, we set out to transform ArQule from a chemistry services business to a successful, sustainable biopharmaceutical company. In 2007, we continued our progress toward that goal as we entered into a significant partnership with our selective c-Met inhibitor and lead product, ARQ 197, moved ARQ 197 into a series of Phase 2 clinical trials, continued to build our development capabilities, and made further strides in shoring up our pipeline and also our financial position.

In addition, we began to prepare for the departure of our long-time CEO, Stephen Hill, in March 2008. Much of the credit for transforming the Company from a chemistry services business to a development stage biopharmaceutical company goes to Steve Hill. We are grateful for his many contributions to our success.

In the first half of the year, we signed a landmark deal with Kyowa Hakko for Asian rights to ARQ 197. We believe this deal is the largest to date in any therapeutic area for Asian rights to a Phase 1/2 compound. We recognize the value of this compound as an unpartnered asset in the rest of the world, and we are exploring potential partnerships with pharmaceutical and biotechnology companies that would provide for ArQule significant participation in future development and commercialization activities, as well as compelling economics.

In June, Phase 1 clinical data with ARQ 197 were presented at an oral session at ASCO, the leading oncology meeting of the year. Subsequently, we initiated the Phase 2 program for ARQ 197, selecting tumor types that reflect the multiple roles of c-Met as a driver of the onset and progress of certain cancers. We are enrolling patients in the first two of these Phase 2 studies, in MiT tumors and pancreatic cancer. Pending the completion of an ongoing Phase 1 trial in non-small cell lung cancer, we plan to initiate a Phase 2 trial in this indication. Trials in additional indications, including prostate cancer and gastric cancer, are in the planning stages or under consideration.

As we have elucidated the basic mechanism by which ARQ 197 inhibits c-Met, we have been able to generate important insights into a novel, broader approach to kinase inhibition. These insights, gained through an analysis of crystallographic structural data and other experiments, explain why ARQ 197 is selective for c-Met without competing with ATP (adenosine triphosphate), an energy source for cells. We believe this exciting information will define a platform for the discovery of selective inhibitors of many kinases, and we will be focusing much of our discovery efforts on this platform in 2008.

Our E2F-1 DNA damage response program, which includes ARQ 501 and ARQ 761, continues. The observation of QT-prolongation with ARQ 171 late in 2007 led to a refocusing on a newer molecule, ARQ 761, which should enter clinical development in 2008. We are hopeful that this compound will have an improved risk-benefit profile and will justify ongoing development of this exciting mechanistic approach. We and our partner, Roche, are evaluating clinical and pre-clinical data with the E2F-1 compounds that will inform Roche's decision regarding their further participation in this program.

In addition to progress in our development portfolio, our pre-clinical programs remain highly productive. Two projects an Eg5 inhibitor and a B-Raf kinase inhibitor are reaching late stage pre-clinical testing. We anticipate the Eg5 inhibitor will enter the clinic in 2008, with the B-Raf program not far behind. Pre-clinical data with both of these product candidates have shown that they are differentiated from other molecules in their respective classes.

From a financial standpoint, we completed a successful follow-on offering during 2007 that raised over \$50 million in cash. When combined with the \$30 million up-front payment paid to us by Kyowa and other resources, we ended 2007 with slightly over \$135 million in cash and marketable securities.

Looking forward, I believe ArQule is well positioned for success in 2008 and beyond. We can begin to expect data from our ongoing clinical trials with ARQ 197, the initiation of new trials with ARQ 197, and the introduction of our Eg5 inhibitor and ARQ 761 into the clinic, this year. Moreover, we continue to focus on novel ways to intervene in oncogenic processes, in particular through development of our kinase platform. We will also be focusing on a number of partnering opportunities across all of our assets.

Peter S. Lawrence President and Chief Operating Officer

ARQULE, INC.

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD MAY 15, 2008

To Our Stockholders,

Our 2008 Annual Meeting of Stockholders will be held at the offices of ArQule, Inc. at 19 Presidential Way, Woburn, Massachusetts 01801-5140 at 10:00 a.m. Eastern Daylight Savings Time on Thursday, May 15, 2008 for the following purposes:

- To elect Ronald M. Lindsay, William G. Messenger, and Patrick J. Zenner as directors to hold office for a term of three years and until their respective successors are elected and qualified;
- To approve amendments to our Amended and Restated 1994 Equity Incentive Plan to increase the number of shares of common stock available for awards granted under the Plan by 2,400,000, from 9,600,000 to 12,000,000 shares of common stock and to incorporate other changes described in our proxy statement;
- To ratify the selection of PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit our financial statements for the year ending December 31, 2008; and
- 4. To transact any other business that may properly come before the meeting or any adjournment of the meeting.

Only stockholders of record at the close of business on March 28, 2008 will be entitled to vote at the meeting or any adjournment. A list of these stockholders will be available during ordinary business hours at the offices of ArQule, Inc. for a period beginning ten days before the meeting. Any stockholder may examine the list for any purpose germane to the meeting.

We look forward to seeing you at the meeting.

IT IS IMPORTANT THAT YOUR SHARES ARE REPRESENTED AT THE MEETING. THEREFORE, WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING, PLEASE COMPLETE YOUR PROXY AND RETURN IT IN THE ENCLOSED ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED IN THE UNITED STATES. YOU MAY ALSO SUBMIT YOUR PROXY ELECTRONICALLY OR BY TELEPHONE, ACCORDING TO THE INSTRUCTIONS ON THE ENCLOSED PROXY CARD. IF YOU ATTEND THE MEETING AND WISH TO VOTE IN PERSON, YOUR PROXY WILL NOT BE USED. YOU MAY REVOKE YOUR PROXY AT ANY TIME BEFORE IT IS VOTED.

By order of our Board of Directors,

Peter S. Lawrence

President and Chief Operating Officer

Woburn, Massachusetts Dated: April 14, 2008

ARQULE, INC.

19 Presidential Way Woburn, Massachusetts 01801-5140 Telephone: (781) 994-0300

Proxy Statement

General Information

With the enclosed proxy card, our Board of Directors is soliciting your proxy for use at our 2008 Annual Meeting of Stockholders to be held at the offices of ArQule, Inc. at 19 Presidential Way, Woburn, Massachusetts 01801-5140 at 10:00 a.m. Eastern Daylight Savings Time on Thursday, May 15, 2008 and at any adjournments of the meeting. This proxy statement and accompanying proxy card are first being sent or given to stockholders on or about April 14, 2008.

The principal business expected to be transacted at the meeting, as more fully described below, will be the election of directors, the approval of amendments to our Amended and Restated 1994 Equity Incentive Plan, and the ratification of the selection of PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit our financial statements for the fiscal year ending December 31, 2008.

Stockholders may revoke the authority granted by an executed proxy at any time before its exercise by voting in person at the meeting or by filing with our Secretary a written revocation or a duly executed proxy bearing a later date.

We will bear the cost of solicitation of proxies, including charges and expenses of brokerage firms and others for forwarding solicitation material by mail to beneficial owners of stock. In addition, our officers and employees may solicit proxies in person or by telephone.

Only stockholders of record at the close of business on March 28, 2008 will be entitled to vote at the meeting. On that date, we had outstanding 43,772,775 shares of common stock, \$0.01 par value ("Common Stock"), each of which is entitled to one vote. The presence at the meeting, in person or by proxy, of a majority of our outstanding shares of Common Stock entitled to vote at the Annual Meeting shall constitute a quorum for the transaction of business.

You may submit your proxy in writing, electronically, or by telephone according to the instructions on the enclosed proxy card. If you submit a proxy without directions as to votes on the matters to be considered at the Annual Meeting, the proxy will be voted "FOR" the election of the nominees listed below and "FOR" proposals 2 and 3. The Company is not aware of any matters that will be brought before the annual meeting (other than procedural matters) that are not referred to herein. Abstentions and broker non-votes will be considered present for purposes of determining the presence of a quorum. Broker non-votes are proxies submitted by brokers that do not indicate a vote for one or more proposals because the brokers have not received instructions from the beneficial owners on how to vote on these proposals and do not have discretionary voting authority.

PROPOSAL 1 ELECTION OF DIRECTORS

Our By-laws provide that the number of directors is established by our Board of Directors. For 2008, the number of directors is currently fixed at six, divided into three classes as equal in number as possible and defined by the expiration dates of their terms of service. Currently, there are six directors serving. At the meeting, three directors will be elected to a term of office of three years, expiring in 2011, and until their respective successors are elected and qualified.

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Ronald M. Lindsay, Ph.D., William G. Messenger, D. Min, and Patrick J. Zenner, all of whom are presently serving as directors, have been nominated for re-election by our Board of Directors for a term of three years. Unless your proxy withholds authority to vote for any of the nominees, the shares represented by your proxy will be voted for their election as the Board's nominees. If any nominee is unable to serve, which is not expected, the shares represented by your proxy will be voted for such other candidate as may be nominated by the Board of Directors.

Vote Required

The affirmative vote of a plurality of the shares of Common Stock cast by the stockholders present at the meeting, in person or by proxy, and entitled to vote on this proposal is required to elect each of the nominees. Broker non-votes and votes withheld will not affect the outcome of the election of directors.

Set forth below is certain information about the qualifications and other directorships of the nominees and our continuing incumbent directors.

Nominees for Terms Expiring at the 2011 Annual Meeting

Ronald M. Lindsay, Ph.D. (Age: 60) Dr. Lindsay has been a director since June 2005. He currently operates Milestone Consulting, a biopharmaceutical consulting enterprise. From 2004 to 2006, he was a consultant and Chairman of the Scientific Advisory Board of Serono International, S.A. Dr. Lindsay was Chief Scientific Officer and Vice President, Research and Development, at diaDexus Inc. from 2000 to 2004. He also held a number of positions at Millennium Pharmaceuticals, Inc., including Senior Vice President, Biotherapeutics, from 1997 to 2000. At Regeneron Pharmaceuticals, he was a founding scientist and Vice President, Neurobiology, from 1989 to 1997. Dr. Lindsay also worked at the Sandoz Institute for Medical Research, London, where he was Head of Cell Biology from 1984 to 1989. He is a director of Sequenom Inc. and HistoRx Inc., and a Senior Advisor to TVM-Capital, Munich. Dr. Lindsay completed post-doctoral work at the Friedrich Miescher Institute, and he holds a B.Sc. (Hons) in chemistry from the University of Glasgow and a Ph.D. in biochemistry from the University of Calgary.

William G. Messenger, D. Min. (Age: 47) Dr. Messenger has been a director since January 2005. He has been the owner and managing director of the Lexington Sycamore Group, consultants in the fields of business strategy, organization, and leadership, since 1994. Dr. Messenger serves as an adjunct faculty member and head of the program in Faith and Ethics in the Workplace at Gordon-Conwell Theological Seminary. Dr. Messenger received a B.S. in Physics with highest honors from Case Western Reserve University, an M.B.A. with high distinction from Harvard Business School, a Master of Divinity degree, *summa cum laude*, from Boston University School of Theology, and a Doctor of Ministry from Gordon-Conwell Theological Seminary.

Patrick J. Zenner (Age: 61) Mr. Zenner was named Chairman of the Board in May 2004 and has been a director since 2002. Mr. Zenner is a 32-year veteran of the pharmaceutical industry. Since July 2007, Mr. Zenner has been serving as the Interim Chief Executive Officer of Exact Sciences Corporation. From March 2005 to May 2006, he was the Interim Chief Executive Officer of CuraGen Corporation. In 2001, Mr. Zenner retired from the position of President and Chief Executive Officer of Hoffmann-La Roche Inc., North America. Hoffmann-La Roche Inc. is the prescription drug unit of the Roche Group. Mr. Zenner is currently on the Board of Trustees of Creighton University and is Chairman of the Board of Trustees of Fairleigh Dickinson University. In addition, Mr. Zenner is a member of the Boards of Directors of CuraGen Corporation, Geron Corporation, Sciele Pharma, Inc., Xoma Ltd., West Pharmaceutical Services, Inc., and Exact Sciences, Inc.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF THE NOMINEES LISTED ABOVE.

Continuing Incumbent Directors with Terms Expiring at the 2009 Annual Meeting

Timothy C. Barabe (Age: 55) Mr. Barabe has been a director since November 2001. Mr. Barabe is currently Senior Vice President and Chief Financial Officer of Human Genome Sciences, Inc. Previously, he was with Regent Medical Limited, a U.K.-based, privately owned, surgical supply company, where he was Chief Financial Officer from 2004-2006. Mr. Barabe served with Novartis AG from 1982 through August 2004 in a succession of senior executive positions in finance, general management, and strategic planning, most recently as the Chief Financial Officer of Sandoz GmbH, the generic pharmaceutical subsidiary of Novartis. From February 2002 until April 2003, Mr. Barabe was Group Vice President and President, CIBA Vision Corporation Specialty Lens Business. From 1993 through January 2002, Mr. Barabe was the Chief Financial Officer of CIBA Vision Corp., a contact lens and lens care subsidiary of Novartis. Mr. Barabe received his B.B.A. degree from the University of Massachusetts (Amherst) and his M.B.A. degree from the University of Chicago.

Continuing Incumbent Directors with Terms Expiring at the 2010 Annual Meeting

Michael D. Loberg, Ph.D. (Age: 60) Dr. Loberg has been a director since January 2007. He currently serves as Acting Chief Executive Officer of Inotek Pharmaceuticals Corporation. He previously served as president and chief executive officer of NitroMed, Inc. from 2003 to 2006, and as chief executive officer of that company from 1997 to 2003. Dr. Loberg held a number of senior management positions at Bristol-Myers Squibb (BMS) from 1979 to 1997, including president of the Company's Oncology and Immunology, U.S. Primary Care, Northern Europe, Specialty Pharmaceuticals and Squibb Diagnostics divisions, as well as director and vice president, E.R. Squibb & Sons Research and Development. Prior to BMS, he was at the University of Maryland, as associate professor of medicine and pharmacy from 1976 to 1979, and as assistant professor from 1973 to 1976. Dr. Loberg is a director of Advanced Magnetics, Inc., Kereos, Inc., and Inotek Pharmaceuticals Corporation. He holds a B.S. in chemistry from Trinity College and a Ph.D. in chemistry from Washington University.

Nancy A. Simonian, M.D. (Age: 47) Dr. Simonian has been a director since May 2006. Dr. Simonian is currently Chief Medical Officer and Senior Vice President of Clinical, Medical, and Regulatory Affairs at Millennium Pharmaceuticals, Inc., where she has worked since 2001. From 1995 to 2001, Dr. Simonian was at Biogen, Inc. where she was the Vice President of Medical Research, responsible for the development of Avonex, Tysabri, and multiple gene-therapy clinical development programs. Prior to joining the pharmaceutical industry, Dr. Simonian was on the faculty of Massachusetts General Hospital and Harvard Medical School as an assistant professor of neurology. She was also engaged in both basic science and clinical research related to neurodegenerative diseases. Dr. Simonian graduated from Princeton University, received her M.D. from the University of Pennsylvania Medical School, and completed her internship in medicine and residency in neurology at Massachusetts General Hospital.

CORPORATE GOVERNANCE

Corporate Governance Guidelines

At ArQule, Inc. ("ArQule" or the "Company") we value honesty, integrity, and fairness in our dealings with our fellow employees, our stockholders, our collaborators and our communities. In addition to meeting both the letter and the spirit of regulations and rules adopted by the Securities and Exchange Commission ("SEC"), other federal and state laws and regulations and the standards of the Nasdaq Global Market ("Nasdaq"), our directors have mandated that our business dealings comply with the highest ethical and corporate governance standards.

We have adopted general corporate governance principles, the ArQule Corporate Code of Conduct ("Code of Conduct") and related policies to provide guidance to our directors and management in their efforts to provide effective and appropriate corporate governance. As is the case with our other policies and practices, the tenets reflected in the Code of Conduct and policies are intended to align the interests of our directors, management and other employees with those of our stockholders. We will review and, if necessary in our judgment, modify the guidelines from time to time. The governance principles, Code of Conduct, and certain related policies are available on our website at http://www.arqule.com in the "Investors and Media" Section under the heading "Corporate Governance."

Corporate Code of Conduct

The Code of Conduct was and is applicable to our directors, employees and officers, including our former President and Chief Executive Officer, our President and Chief Operating Officer, our Vice President of Finance and Corporate Controller (our principal executive officer, principal financial officer and principal accounting officer, respectively), and our Chief Medical Officer. The Code of Conduct addresses: the standards of conduct expected of each director, officer and employee; conflicts of interest; disclosure process; compliance with laws, rules and regulations (including insider trading laws); corporate opportunities; confidentiality; fair dealing; and protection and proper use of Company assets. It also strongly encourages the reporting of any illegal or unethical behavior. Waivers of the requirements of the Code of Conduct or associated policies with respect to members of the Board of Directors and executive officers are subject to the approval of the full Board or a committee of the Board to which resolution of the matter is delegated and will be disclosed on our website.

Director Qualifications and Nomination Process

Director Qualifications

The Compensation, Nominating and Governance Committee identifies nominees for directors from various sources including referrals from current Board members and industry contacts. In the past, it has used third party consultants to assist in identifying, evaluating, and recruiting potential nominees, but no third party consultant was used during fiscal year 2007. The directors have not set formal criteria or qualifications for individuals to be nominated or re-nominated as candidates for Board membership. Instead, the Compensation, Nominating and Governance Committee considers many factors in evaluating an individual's suitability. Such factors include a candidate's judgment, ethics, integrity, values, business experience, educational and professional background, level of commitment, and other competing professional obligations. The Company does not require members of the Board (or our executive officers) to purchase or hold a minimum amount of shares of our Common Stock.

Stockholder Nominations

The Compensation, Nominating and Governance Committee has not established any special procedures for stockholder submissions to the Compensation, Nominating and Governance Committee

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of nominees for election to the Board of Directors. Our By-laws permit any stockholder entitled to vote for the election of directors to nominate directors. We believe that this long-standing mechanism, in place since incorporation of the Company, provides the appropriate means for stockholder nominations. Pursuant to our By-laws, a stockholder wishing to nominate a director candidate must deliver or mail written notice of such nomination to the Chairman of the Board, the President, or the Secretary of the Company at our principal executive office. If a stockholder is nominating a director candidate for election at the annual meeting of stockholders, notice must be received at least 75 days before the anniversary date of the prior year's meeting, assuming there was an annual meeting in the prior year and the date of the current year's annual meeting is within 30 days of the anniversary date of the prior year's meeting. Otherwise, notice must be received at least 45 days before the date of the current year's annual meeting or a special meeting, if at least 60 days' notice or prior public disclosure of the date of the current year's annual meeting or the special meeting is provided. If neither of the previous two sentences applies, notice must be received no later than 15 days after the date on which notice of the date of the current year's annual meeting or the special meeting was mailed or public disclosure was made of such meeting date. The notice must include the stockholder's name and address, the class and number of shares of securities beneficially owned by such stockholder, and each nominee's:

- (i) name, age, business address, and home address;
- (ii) principal occupation or employment;
- (iii) beneficial ownership of Company securities, including the class and number of shares of stock; and
- (iv) any other information relating to the nominee that is required to be disclosed in solicitations for proxies for election of directors by Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

The Compensation, Nominating and Governance Committee will consider all nominees submitted by stockholders in the manner described above and will evaluate all potential nominees using the same criteria.

Communications with Directors

We do not have a formal process for communication by stockholders to our directors. However, stockholders and others who wish to communicate may write to the Board as a whole, or to individual directors at:

Investor Relations
ArQule, Inc.
19 Presidential Way
Woburn, Massachusetts 01801-5140
Attn. William B. Boni
Vice President, Investor Relations/Corporate Communications

Such communications will be forwarded directly to the addressee(s).

Director Independence

For a director to be designated as independent, as defined by Nasdaq listing standards, our Board must determine that he or she has no "material relationship" with the Company other than that of a

director. When assessing the materiality of a director's relationship with the company, the Board considers:

all relevant facts and circumstances, not only of the director's relationship with the Company, but also that of the persons or organizations with which the director is affiliated;

the frequency and regularity of any services the director performed for the Company outside of the scope of duties as a director:

whether the director carried out those services at arm's length in the ordinary course of business; and

whether the director provided those services on substantially the same terms as those prevailing at the time for unrelated parties in comparable transactions.

For a Nasdaq-listed company, a director is not considered independent if any of the following circumstances exist:

the director is currently, or was at any time during the preceding three years, employed by the company, its parent or subsidiaries, or if any of the director's family members is, or was, an executive officer of the company, its parent or subsidiaries, at any time during the preceding three years;

the director has accepted, or has a family member who has accepted, from the company, its parent or subsidiaries, any payment in excess of \$100,000 during any twelve-month period within the preceding three years, other than (a) compensation for board or board committee services, (b) compensation paid to a family member who is a non-executive employee of the company, its parent or any subsidiary; or (c) benefits under a tax-qualified retirement plan or non-discretionary compensation;

the director is, or has a family member who is, employed as an executive officer of any other entity where at any time during the preceding three years any of the executive officers of the company served on the compensation committee of such other entity;

the director is, or has a family member who is, a partner in, or a controlling stockholder or an executive officer of, any organization to which the company made, or from which the company received, payments (other than payments arising solely from investments in the company's securities or payments under non-discretionary charitable contribution matching programs) that exceed the greater of \$200,000 or 5% of the recipient's consolidated gross revenues during the current or any of the past three fiscal years;

the director is, or has a family member who is, a current partner of the company's outside auditors, or was a partner or employee of the company's outside auditor who worked on the company's audit at any time during the past three years; or

the director otherwise has a relationship that, in the opinion of the Board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

On January 17, 2008, the Board of Directors determined that Timothy C. Barabe, Ronald M. Lindsay, Michael D. Loberg, William G. Messenger, Nancy A. Simonian, and Patrick J. Zenner are "independent directors" as defined in Rule 4200(a)(15) of the listing standards of the Nasdaq Marketplace Rules, and these directors constitute a majority of the members of the Board.

Review and Approval of Related Person Transactions

Pursuant to our written Conflict of Interest Policy, no director, director nominee, or executive officer may enter into any transaction or relationship that is disclosable by the Company pursuant to SEC Regulation S-K, Item 404, without the prior approval of the disinterested members of the Compensation Committee. No director or executive officer may directly or indirectly approve, or represent the Company or the other party in arranging, the terms of any transaction between the Company and a party with which he/she has any relationship of a type that is disclosable by the Company pursuant to SEC Regulation S-K, Item 404. All transactions between ArQule and a party with which a director or executive officer has such a relationship shall be on an arm's length basis.

Certain relationships or transactions may arise that would be deemed acceptable and appropriate upon full disclosure of the relationship or transaction, after review of all of the relevant factors, including those specified in our Conflict of Interest Policy, and approval by the Compensation, Nominating and Governance Committee.

Compensation, Nominating and Governance Committee Interlocks and Insider Participation

No member of the Compensation, Nominating and Governance Committee during 2007 served as an officer, former officer, or employee of the Company or had a relationship disclosable under our policies. Further, during 2007, no executive officer of the Company served as:

a member of the compensation committee (or equivalent) of any other entity, one of whose executive officers served as one of our directors or was an immediate family member of a director, or served on our Compensation, Nominating and Governance Committee; or

a director of any other entity, one of whose executive officers or their immediate family member served on our Compensation, Nominating and Governance Committee.

BOARD COMMITTEES AND MEETINGS

The Board of Directors held eleven meetings during 2007. Each director attended at least 75% of the aggregate number of meetings of the Board and the committees of the Board on which he or she served.

We do not have a policy regarding attendance of directors at our annual meeting of stockholders. Stephen A. Hill, then our President and Chief Executive Officer and a director, attended our annual meeting in May 2007.

Committees of the Board

Our Board of Directors has a standing audit committee (the "Audit Committee"), compensation, nominating, and governance committee (the "Compensation, Nominating and Governance Committee"), and science committee (the "Science Committee"). Independent directors chair and entirely make up each of these committees.

Audit Committee

In 2007, the members of the Audit Committee were Mr. Barabe (Chairman), Dr. Messenger, and Mr. Zenner. The Audit Committee met seven times in 2007. Each member of the Audit Committee, both during 2007 and currently, was and is independent as defined by Nasdaq listing standards. The Board of Directors has determined that Mr. Barabe is an audit committee financial expert as defined in SEC rules.

The duties and principal purposes of the Audit Committee include:

generally, to oversee the integrity of the Company's financial reporting process; in particular, to monitor: the integrity of the Company's financial statements; the Company's compliance with legal and regulatory requirements; and the qualifications, independence and performance of the Company's independent registered public accountants and of its internal audit function; pre-approval of all audit services; and preparing the audit committee report that is required to be included in the proxy statement for our annual meeting of stockholders; The Company's independent registered public accountants (currently, PricewaterhouseCoopers LLP, an independent registered public accounting firm) are ultimately accountable to the Audit Committee in its capacity as a committee of the Board. The Audit Committee has sole authority and responsibility to select, hire, oversee, evaluate, approve the compensation of, and, where appropriate, replace our independent registered public accountants. Further information regarding the responsibilities performed by the committee is provided in the committee's charter. The report of the Audit Committee is on page 27. Compensation, Nominating and Governance Committee In 2007, the members of the Compensation, Nominating and Governance Committee were Dr. Messenger (Chairman), Dr. Loberg and Mr. Zenner. The Compensation Committee met seven times in 2007. The duties and purposes of the Compensation, Nominating and Governance Committee include: advising the Board concerning the Company's compensation philosophy and policies, in general, and, in particular, to determine, or recommend to the Board for determination, the compensation of the Company's Chief Executive Officer and all other executive officers and directors; advising the Board regarding succession planning for the Company's Chief Executive Officer; identifying individuals qualified to become members of the Board; recommending candidates to the Board to fill vacancies on the Board; recommending to the Board the directors to be appointed to its committees;

assessing, or insuring that the Board assesses, the performance of individual members of the Board and the Board as a whole;

administering our stock option, stock purchase, and other stock compensation plans;

reviewing and approving or rejecting proposed related party transactions;

preparing the Committee's report that is required to be included in the proxy statement for our annual meeting of stockholders; and

overseeing the Company's efforts to meet its corporate governance, legal, and regulatory obligations and identifying, reviewing, and resolving issues relating to such matters.

Further information regarding the responsibilities performed by the Committee is provided in the committee's charter.

The report of the Compensation, Nominating and Governance Committee is on page 17.

Science Committee

In 2007, the members of the Science Committee were Dr. Lindsay (Chairman), Dr. Loberg and Dr. Simonian. The Science Committee met twice during 2007.

The Science Committee is responsible for:

reviewing the scientific direction of the Company;

playing a role in assessing the manner by which the Company will continue to enhance its capabilities as a drug discovery organization (whether by acquisition, merger, in-licensing, internal growth, or a combination of those methods); and

evaluating the scientific opportunities under consideration by management.

The Science Committee is also available to management to review data relating to new scientific directions for the Company and other science-related matters and to perform such other services as the Board of Directors may delegate to it.

Charters

The Board of Directors has adopted written charters for each of our standing committees, which may be viewed by accessing the "Investors and Media" Section of our website at www.arqule.com and clicking on the headings "Corporate Governance" and "Committee Charters."

DIRECTOR COMPENSATION

The following table provides information concerning compensation paid by the Company to its non-employee directors during 2007. Any director who is also an employee of the Company is not compensated for his or her service as a director. During 2007, Dr. Hill, the Company's former President and Chief Executive Officer, also served on the Board of Directors, but did not receive any compensation for services as a director.

Name	Fees Earned or Paid in Cash (\$)	Option Awards(1) (\$)	Total (\$)
Timothy C. Barabe(2)	\$ 47,750	\$ 50,840	\$ 98,590
Ronald M. Lindsay, Ph.D.	40,000	65,823	105,823
Michael D Loberg, Ph.D.(3)	35,500	68,185	103,685
William G. Messenger, D. Min.	46,500	67,471	113,971
Nancy A. Simonian, MD	30,500	60,683	91,183
Patrick J. Zenner	54,500	76,260	130,760

- This column reflects the dollar amount recognized for financial reporting purposes during 2007 in accordance with Financial Accounting Standards Board Statement No. 123(R), *Share-Based Payment* ("FAS 123(R)") for all option awards outstanding for any portion of the current year. Assumptions used in the calculation of this amount for years ended December 31, 2007, 2006 and 2005 are included in Note 3 to the Company's audited financial statements for the year ended December 31, 2007, included in the Company's Annual Report on Form 10-K filed with the SEC on March 17, 2008 ("2007 Annual Report on Form 10-K"). As of December 31, 2007, for each director the aggregate number of outstanding option awards to purchase the indicated number of shares of Common Stock is as follows: Mr. Barabe, 46,000; Dr. Lindsay, 30,000; Dr. Loberg, 30,000; Dr. Messenger, 35,000; Dr. Simonian, 30,000; and Mr. Zenner, 52,500.
- (2)
 Mr. Barabe elected to have a portion of his fees for service as a director in the amount of \$28,590 paid to him in the form of 4,042 shares of our Common Stock in accordance with our 2005 Director Stock Compensation Plan.
- (3)

 Mr. Loberg elected to have a portion of his fees for service as a director in the amount of \$10,230 paid to him in the form of 1,475 shares of our Common Stock in accordance with our 2005 Director Stock Compensation Plan.

Currently, each of our non-employee directors who is serving as a director prior to and immediately following any annual meeting of stockholders receives a \$15,000 annual retainer. Each non-employee director also receives \$2,000 for each day on which the Board of Directors meets and the director attends and \$1,000 for each day on which a committee of the Board of Directors meets and the director attends. In addition to the base compensation for directors, certain directors receive additional compensation. The director serving as Chairman of the Board of Directors (currently, Mr. Zenner) receives a \$15,000 annual retainer; the director serving as Chairman of the Audit Committee (currently, Mr. Barabe) receives a \$12,500 annual retainer; the director serving as Chairman of the Compensation, Nominating and Governance Committee (currently, Dr. Messenger) receives a \$10,000 annual retainer; and the director serving as Chairman of the Science Committee (currently, Dr. Lindsay) receives a \$10,000 annual retainer. All of our non-employee directors, currently six directors, are eligible to participate in our Amended and Restated 1996 Director Stock Option Plan. Pursuant to the Director Stock Option Plan, an option to purchase 20,000 shares of Common Stock is automatically granted to each non-employee director (other than the Chairman) at the time that he or she is first elected or appointed to the Board of Directors. This initial option will become exercisable as to 6,666 shares on the date of the Company's next annual meeting following the date of grant and as to 6,667 shares on the date of each of the next two annual meetings. Also, at each annual meeting of

stockholders, each eligible director (other than the Chairman) serving as a member of the board of directors prior to and immediately after such annual meeting is automatically granted an immediately exercisable option to purchase 15,000 shares of Common Stock (whether or not the director is a nominee for election at such annual meeting).

Upon the initial election of a non-employee director as Chairman of the Board, the non-employee director will be automatically granted an option to purchase 25,000 shares of Common Stock. Those options will become exercisable as to 8,334 shares on the date of the Company's next annual meeting of stockholders following the date of grant and as to 8,333 shares on the date of each of the next two annual meetings of stockholders. In addition, at each annual meeting of stockholders, such eligible director serving as Chairman of the Board prior to and immediately after such annual meeting will be automatically granted an immediately exercisable option to purchase 15,000 shares of Common Stock (whether or not the Chairman is a nominee for election at such annual meeting).

Pursuant to our 2005 Director Stock Compensation Plan, the Company's non-employee directors may elect to receive in lieu of all or a part of their cash compensation for service as a director, an equivalent amount of Common Stock. As noted in the table above, in 2007 Mr. Barabe and Dr. Loberg received a portion of their director fees in the amount of \$28,590 and \$10,230, respectively, in the form of Common Stock.

COMPENSATION DISCUSSION AND ANALYSIS

The compensation of our named executive officers, including our former President and Chief Executive Officer, is the responsibility of the Compensation, Nominating and Governance Committee of the Board of Directors (the "Compensation Committee").

Compensation Philosophy

Guiding Principles:

Our executive compensation program is designed to be closely linked to corporate performance and returns to stockholders. To this end, we have developed an overall compensation strategy and a specific compensation plan that establish competitive base salaries and tie a significant portion of executive compensation to the Company's success in meeting specified and measurable performance goals. By using stock options and other stock-based awards, we ensure that part of each executive's compensation is closely tied to the performance of our stock. We believe that a significant part of overall compensation for senior executives should be "at risk," i.e., contingent upon successful implementation of the Company's strategy. Individuals with the greatest influence on company-wide performance should have the largest amount of cash benefits and stock options at risk.

Compar	ny's strategy. Individuals with the greatest influence on company-wide performance should have the largest amount of cash benefitions at risk.
	Objectives:
	To attract and retain the best executive talent available;
	To motivate our executives to achieve the goals inherent in our business strategy;
	To link executive and stockholder interests through equity-based compensation; and
	To provide a compensation package that recognizes individual contributions as well as corporate performance.
	Key compensation elements:
	Base salary;
	Annual performance-based cash bonuses;
	Stock-based incentive awards; and

Each of these elements is described in more detail below.

Employee benefits.

The Role of the Compensation Committee

The members of the Compensation Committee are currently Michael D. Loberg, Ph.D., William G. Messenger, D. Min. (Chairman), and Patrick J. Zenner. Each of the current members is an "independent director" under Nasdaq listing standards, a "Non-Employee Director" within the meaning of Section 16 of the Exchange Act, and an "outside director" within the meaning of Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Tax Code").

The Compensation Committee advises our Board of Directors concerning the Company's compensation philosophy and policies, in general, and, in particular, determines, or recommends to the Board for determination, the compensation of our Chief Executive Officer and other named executive officers and members of the Board of Directors. Recommendations and decisions made by the Compensation Committee are reported to the full Board of Directors for approval or ratification, as appropriate.

The Compensation Committee's Process

General

The Compensation Committee recommends the mix of elements of executive compensation including base salary, annual performance-based bonuses and stock options for our named executive officers. While the Compensation Committee considers the elements of compensation described below separately, the Committee takes into account the full compensation package afforded to each executive officer in making its recommendations. The Compensation Committee also makes recommendations concerning the appropriate linkage of executive compensation to individual and corporate performance and financial returns to stockholders.

The Compensation Committee considers the views of our President and Chief Executive Officer regarding achievement of individual and departmental objectives of those executives reporting directly to him. With the assistance of our Vice President of Human Development, the Compensation Committee reviews selected data from the Radford Biotechnology Survey produced by Radford Surveys & Consulting, a human resources consulting firm ("Radford"), and other compensation data the Compensation Committee deems relevant. In 2007, Radford consultants provided guidance to the Compensation Committee with respect to appropriate companies for comparison and provided it with relevant market data and alternatives to consider when making compensation decisions for our named executive officers and other key employees. The Radford Survey aggregates compensation data from hundreds of biopharmaceutical companies including both public and private firms of varying sizes, stages of development and geographic locations. We extract data from the Survey that relate to public companies with characteristics the Compensation Committee believes are relevant to those of the Company. The Compensation Committee analyzes these data to compare the Company's compensation packages to compensation levels in our industry and benchmark the fairness and competitiveness of the total compensation the Company offers.

In addition, when the Compensation Committee on occasion deems it appropriate, compensation data for companies outside the biotechnology industry are also reviewed. Some of the individual biotechnology companies whose published executive compensation data the Compensation Committee regularly reviews for comparison purposes are Ariad Pharmaceuticals, Inc.; Array BioPharma Inc.; Exelixis, Inc.; Infinity Pharmaceuticals, Inc.; Onyx Pharmaceuticals, Inc.; and OSI Pharmaceuticals, Inc.

Benchmarking

In general terms, as a basis for its recommendations, the Compensation Committee benchmarks total compensation for all of our employees to the median compensation (*i.e.* 50th percentile) of employees performing similar job functions at biotechnology companies nationally, adjusted for differences in company size, stage of development, location, and performance. However, we strongly believe in retaining the best talent among our executive management team. Therefore, we have recommended, and may recommend in the future, total compensation packages for senior executive management that vary substantially from the median based on factors such as industry experience, scope of responsibility, knowledge, and unique qualifications.

Elements of Compensation

Base Salary

Salary levels are considered annually as part of our performance review process, but also in the cases of promotion or other change in the job responsibilities of an executive officer. In 2007, Dr. Hill was paid \$466,516 in base salary; Mr. Lawrence, \$359,980; and Dr. Rulewski, \$325,000. The consulting firm that provided Mr. Woodrich's services was paid \$263,200 in 2007 and Mr. Woodrich was paid directly an additional \$25,600 in consulting fees (See footnote 8 to Summary Compensation Table on

page 18). Dr. Hill's base salary in 2007 represented an increase of \$18,260 or 4.1% from his 2006 base salary of \$448,256. The base salary paid to Dr. Hill reflected his performance as an executive officer, national salary competition in the biotechnology sector, salary levels in effect for comparable positions in companies with characteristics similar to ours, and the achievement of objectives set by the Board of Directors.

Mr. Lawrence's and Dr. Rulewski's base salaries in 2007 were not increased from their annualized base salaries of \$360,000 and \$325,000, respectively, as provided for in their employment agreements.

Salaries of our named executive officers are reported in the Summary Compensation Table on page 18.

Performance-Based Bonuses

Cash bonuses represent a percentage of each named executive officer's salary. In determining the target award opportunity for the bonus of a particular executive, we consider compensation data and level of strategic contribution to the Company's performance. As a result, Dr. Hill's target bonus for 2007 was 50% of his base salary or \$233,258; Mr. Lawrence's, 35% or \$126,000; and Dr. Rulewski, 35% or \$113,750.

At the beginning of each fiscal year, we set corporate goals at minimum, planned, and maximum levels of performance and weight the goals according to their importance to our corporate strategy. Levels of performance for these goals are expressed as percentages which, when determined by our Board of Directors following conclusion of the fiscal year, are aggregated to arrive at an overall level of performance for the Company. In determining individual bonus amounts for our named executive officers, our directors take into consideration the Company's overall performance, the degree of responsibility of the named executive officer for achievement of a specific goal or goals, and the amount of the named executive officer's target bonus.

The following is a summary description of the corporate goals for 2007 used to determine performance-based bonuses:

Portfolio Growth

Identify at least one compound suitable for future IND filing, supported by appropriate in vivo data.

Add at least one new clinical stage program to ArQule's portfolio from internal or external sources.

C-Met Program

Identify at least one patient/tumor population to enable proposal to FDA for a special protocol assessment.

E2F Program

Present complete data package to Roche.

Business Development

Complete a regional licensing and co-development transaction meeting specific financial and commercial requirements.

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Financial

Achieve a specified cash balance at end of year with any necessary equity financing at a specified minimum share price.

Following the recommendations of the Compensation Committee, our Board of Directors determined that, on a weighted basis, our overall level of performance was 103% of that which we had planned. This percentage reflected performance with respect to the C-Met Program and Business Development goals that exceeded planned performance, and performance with respect to the Portfolio Growth, E2F Program and Financial goals that was less than planned.

Dr. Hill was awarded a cash bonus in January 2008 of \$240,968 or 103% of his target bonus in respect of his performance during 2007. The bonus awards made to our other named executive officers are reported in the Summary Compensation Table on page 18.

Stock Options

We grant stock options to the named executive officers under our Amended and Restated 1994 Equity Incentive Plan. It is our current policy to grant stock options with an exercise price equal to the closing price of our Common Stock as reported by Nasdaq on the date of grant. Options vest over various periods of time, generally four years. Stock option grants are designed to encourage the creation of stockholder value over the long term since the full benefit of the option grant cannot be realized unless stock price appreciation is achieved, and, once achieved, is maintained and increased. Accordingly, stock option grants align the interests of executive officers and employees with those of stockholders. In determining the amount of these grants, we evaluate the executive's job level, promotions, responsibilities he or she will assume in the upcoming year, and responsibilities in prior years. In addition, we take into account the size of the executive's awards in the past and market data relating to compensation. After consideration of all of these factors, we awarded Mr. Lawrence an option to purchase 200,000 shares of Common Stock in January 2008 for his performance during 2007; and Dr. Rulewski, 50,000 shares.

The Compensation Committee generally recommends annual stock option awards at a meeting in January prior to the first meeting of the Board of Directors in the calendar year. At that meeting (usually in the third week of January), the Board acts upon the recommendations of the Compensation Committee. The effective date for such grants is the date of such meeting of the full Board.

Employment Agreements

ArQule occasionally enters into employment agreements with named executive officers. In general, these agreements are offered in connection with recruiting executive officers when ArQule deems it advisable to provide employment security to new hires. Agreements of this type exist to provide severance pay and related benefits to key executives. Dr. Hill, Mr. Lawrence and Dr. Rulewski have such agreements. Additional information regarding these agreements is set forth on page 19 in the "Employment Agreements" section and page 23 in the "Potential Payments Upon Termination or Change in Control" section.

Other Elements of Compensation and Perquisites

We provide our named executive officers with certain benefits and perquisites. The value of such benefits and perquisites provided in 2007 was less than \$10,000 for each named executive officer. We provided these benefits on the same terms as those applicable to all of our other employees. The primary benefits are:

health (medical, dental and vision) insurance for which the Company pays a portion of the premiums;

a life insurance benefit equivalent to two times base salary and short and long-term disability insurance equal to 60% of base salary, for which the Company pays the premiums;

if necessary in given circumstances to attract management talent, housing allowances and relocation costs;

a retirement plan (401(k) Plan) under which an employee can choose to contribute up to 60% (subject to Tax Code limits) of compensation on a pre-tax basis with a matching contribution from the Company of \$0.50 for each \$1.00 contributed up to the first 6% of compensation;

a tax-qualified stock purchase plan which permits participants to acquire shares of Common Stock at a price that is 85% of the stock price on either the first day or last day of the designated offering period (generally six months), whichever is lower; and

tuition reimbursement up to \$3,000 per year for undergraduate courses and \$6,000 for graduate courses.

Currently, the Company does not have a nonqualified deferred compensation plan, a pension plan, or other defined benefit plan. In addition, the Company does not have a policy on adjustments to, or recovery of, awards if the performance measures on which they were based are adjusted or restated.

Potential Payments to Named Executive Officers Upon Termination or Change in Control

The employment agreements of Dr. Hill, Mr. Lawrence and Dr. Rulewski provide for certain payments to be made to them in the event that their employment with the Company is, or is deemed to be (as provided in the employment agreements), terminated without "cause." Severance benefits are an important tool in attracting and retaining key employees, and provide a degree of financial security to such employees where their employment is terminated through no fault of their own. Each of the agreements also provides for acceleration of vesting of the executive's options in certain circumstances following the occurrence of a change in control of the Company. We believe that it is generally appropriate to vest option awards to key employees in a change in control transaction as such a transaction may often result in the elimination or reduction of the employee's ability to realize value from his or her options.

For information regarding the severance and change in control benefits provided to Dr. Hill, Mr. Lawrence and Dr. Rulewski under their employment agreements, see "Potential Payments Upon Termination or Change of Control" on page 23.

Tax Considerations

Section 409A of the Tax Code is a relatively new federal tax provision. If an executive is entitled to nonqualified deferred compensation benefits that are subject to Section 409A, and such benefits do not comply with Section 409A, the executive would be subject to adverse tax treatment, including accelerated income recognition (in the first year that benefits are no longer subject to a substantial risk of forfeiture) and a 20% penalty tax pursuant to Section 409A. The Internal Revenue Service has extended the transition relief period for amending plans to comply with Section 409A through December 31, 2008. The Company is continuing to evaluate the impact of Section 409A on various of its compensation and benefits plans, programs and arrangements and may modify certain of them as a result of that evaluation.

Section 162(m) of the Tax Code generally denies a deduction to any publicly held corporation for compensation paid to its named executive officers to the extent that any such individual's compensation exceeds \$1 million, subject to certain exceptions, including one for "performance-based compensation." Generally, the Compensation Committee seeks to maximize executive compensation deductions for federal income tax purposes. However, certain awards under the Company's Amended and Restated

1994 Equity Incentive Plan may result in an amount of compensation not being deductible under Section 162(m) of the Tax Code. At the Company's present stage of development, management and the Compensation Committee believe that the loss of a deduction is not significant to the Company. Management and the Compensation Committee intend to consider future changes to the Amended and Restated 1994 Equity Incentive Plan and other benefit plans. The Compensation Committee believes that none of the Company's named executive officers received compensation in 2007 that was nondeductible under Section 162(m) of the Tax Code.

COMPENSATION COMMITTEE REPORT

The Compensation, Nominating and Governance Committee of the Board of Directors of ArQule, Inc., composed entirely of independent directors in accordance with applicable laws, regulations, Nasdaq listing requirements and our governance guidelines, sets and administers policies that govern the Company's executive compensation programs and various incentive and stock programs. The Compensation, Nominating and Governance Committee has reviewed and discussed the Compensation Discussion and Analysis, which appears elsewhere in this proxy statement, with the management of ArQule, Inc. Based on this review and discussion, the Committee recommended to the full Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement.

Submitted by the Compensation, Nominating and Governance Committee,

William G. Messenger, Chairman Michael D. Loberg Patrick J. Zenner

EXECUTIVE COMPENSATION

The tables and text below describe the cash and additional incentive compensation paid to the Company's Chief Executive Officer, Chief Operating Officer (and principal financial officer for SEC reporting purposes), Acting Chief Financial Officer, and Chief Medical Officer (the "named executive officers") for the fiscal years ended December 31, 2007 and 2006.

SUMMARY COMPENSATION TABLE

The following table summarizes total compensation earned during the fiscal years ended December 31, 2007 and 2006 by each of our named executive officers:

Name and Principal Position	Year	Salary (\$) (1)	Bonus (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$) (4)	7	Cotal (\$)
Dr. Stephen A. Hill(5) President and Chief Executive Officer	2007 2006	\$ 466,516 448,256		\$ 1,274,695 465,391	\$ 240,90 231,70	7,230 4,928	\$	1,989,409 1,150,275
Peter S. Lawrence(6) Executive Vice President, Chief Operating Officer, General Counsel and Secretary	2007 2006	359,980 258,922		402,722 238,893	144,00 97,20	7,230 3,420		913,932 598,435
Dr. Nigel J. Rulewski(7) Chief Medical Officer	2007 2006	325,000 136,250		228,958 92,798	65,00 49,00	7,230 720		626,188 278,768
Richard H. Woodrich(8) Acting Chief Financial Officer and Treasurer	2007 2006	288,800 122,800		7,506				296,305 122,800

- (1)

 The amounts in this column include compensation earned but deferred at the election of the named executive officer, such as salary deferrals under the Company's retirement savings plan established under Section 401(k) of the Tax Code.
- Reflects the dollar amount recognized for financial reporting purposes during the year in accordance with FAS 123(R) and thus includes amounts from awards granted during the year and prior years. Assumptions used in the calculation of this amount for years ended December 31, 2007, 2006 and 2005 are included in Note 3 to the Company's audited financial statements for the year ended December 31, 2007, included in the Company's Annual Report on Form 10-K filed with the SEC on March 17, 2008 ("2007 Annual Report on Form 10-K").
- (3)

 Represents bonus amounts earned under our annual incentive program and paid in the first quarter of the following year.
- (4) In 2007, for each named executive officer, the amount includes the Company's contributions to a 401(k) plan account for the executive of \$6,750 and payment of group term life insurance premiums of \$480.
- (5) Dr. Hill served as our President and Chief Executive Officer and a director of the Company until his resignation on March 31, 2008.
- On April 13, 2006, Mr. Lawrence was appointed as our Executive Vice President, Chief Business Officer, General Counsel and Secretary. His salary and non-equity incentive plan compensation for 2006 are pro-rated amounts. On October 4, 2007, Mr. Lawrence was appointed as our Executive Vice President and Chief Operating Officer. As part of his duties, he directs our financial and accounting functions and is responsible for our financial reporting obligations. On April 11, 2008, Mr. Lawrence was appointed as our President.
- (7)

 Dr. Rulewski was appointed as our Chief Medical Officer on August 1, 2006. His salary and non-equity incentive plan compensation for 2006 are pro-rated amounts.

Mr. Woodrich served as Acting Chief Financial Officer and Treasurer from September 1, 2006 through August 31, 2007. From January 1, 2007 through August 31, 2007, we incurred \$288,200 in fees payable to the consulting firm that provided his services. On September 1, 2007, we entered into a consulting agreement with Mr. Woodrich directly and we incurred fees of \$25,600 from September 1, 2007 through December 31, 2007. Pursuant to the terms of the consulting agreement, Mr. Woodrich received a grant of 15,000 stock options on September 1, 2007 vesting 1,250 shares per month over the shorter of the duration of his contract or one year from the date the options were granted. In 2007, 3,750 shares vested with a FAS 123(R) expense of \$7,506. The contract with Mr. Woodrich was terminated in January 2008, and no further payments are due or shares vested under this agreement.

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EMPLOYMENT AGREEMENTS

The Company is party to employment agreements with three of its named executive officers. A summary of the material terms of these agreements follows below. For information regarding the post-employment and change in control benefits provided by these agreements, see "Potential Payments Upon Termination or Change in Control" on page 23.

Employment Agreement with Dr. Stephen A. Hill

In January 2004, we entered into an employment agreement with Dr. Stephen A. Hill that superseded and replaced an earlier agreement signed in April 1999. The latest agreement provides that we will employ him as our President and Chief Executive Officer during the term of the agreement at an initial annual base salary of \$412,000. The base salary is subject to annual review and upward adjustment by the Board of Directors. Dr. Hill is also eligible to receive a discretionary annual cash bonus based on a target amount established by the Company and Company and individual performance.

On October 4, 2007, Dr. Hill's employment agreement was amended to, among other things, provide, in circumstances where Dr. Hill's employment is terminated for any reason other than Cause (as defined herein on page 23) for continued vesting of existing stock options granted to Dr. Hill and to extend the period for exercise of those options.

In addition, the amendment imposed a notice requirement for termination without Cause and provided that Dr. Hill, in lieu of severance payments due under his employment agreement, would continue to receive his base salary during the notice period and be eligible, at the discretion of our Board of Directors, to receive an annual cash bonus. The amendment also limited the business activities competitive with us that Dr. Hill may engage in during the calendar year following his termination.

Effective January 7, 2008, his agreement was again modified to provide that Dr. Hill would continue to serve as our President and Chief Executive Officer and a director of the Company until March 31, 2008, at which time he would resign from those positions, and that he would be eligible to receive the payments and benefits provided for in his employment agreement, as amended, under certain specified circumstances. Those circumstances are described in further detail on page 23 in the "Potential Payments upon Termination or Change in Control" section. Following his resignation on March 31, 2008, Dr. Hill became employed with another company on April 1, 2008. Consequently, no payments or benefits were paid or will become payable to him under his employment agreement, as amended.

Employment Agreement with Peter S. Lawrence

On April 13, 2006, we entered into an employment agreement with Peter S. Lawrence. The agreement provides that we will employ Mr. Lawrence as our Executive Vice President, Chief Business Officer, General Counsel, and Secretary at an initial annual base salary of \$360,000. The base salary is subject to annual review and upward adjustment by the Company. Mr. Lawrence is also eligible to receive a discretionary annual cash bonus based on a target amount established by the Company and Company and individual performance. In addition, we granted Mr. Lawrence an option to purchase 300,000 shares of Common Stock. The option is exercisable at the rate of 25% annually commencing on April 13, 2007. The exercise price of the option is \$6.20 per share, the closing price of a share of Common Stock on April 12, 2006 as reported by Nasdaq.

On October 4, 2007, in connection with his appointment as our Chief Operating Officer, Mr. Lawrence's employment agreement was amended to provide, among other things, that if Mr. Lawrence ceases to serve as our Chief Operating Officer and is reassigned to his previous position,

such reassignment would not be deemed a termination without Cause unless Mr. Lawrence's responsibilities were reduced below his former position as Chief Business Officer. In addition, the amendment provided that Mr. Lawrence would be awarded stock options entitling him to purchase 100,000 shares of Common Stock.

Employment Agreement with Dr. Nigel J. Rulewski

On August 1, 2006, we entered into an employment agreement with Nigel J. Rulewski, M.B., B.S., D.R.C.O.G., D.C.H. The agreement provides that the Company will employ Dr. Rulewski as its Chief Medical Officer at an initial annual base salary of \$325,000. The base salary is subject to annual review and upward adjustment by the Company. Dr. Rulewski is also eligible to receive a discretionary annual cash bonus based on a target amount established by the Company and Company and individual performance. In addition, we granted Dr. Rulewski an option to purchase 200,000 shares of Common Stock. The option is exercisable at the rate of 25% annually commencing on August 1, 2007. The exercise price of the options is \$5.16 per share, the closing price of a share of Common Stock on July 31, 2006 as reported by Nasdaq.

GRANTS OF PLAN-BASED AWARDS FOR FISCAL YEAR 2007

The following table sets forth certain information with respect to awards granted during the fiscal year ended December 31, 2007 to our named executive officers under our equity and non-equity incentive plans:

		Uno	ted Future Pa der Non-Equi ive Plan Awa	ity	All Other Awards: Number of Securities	Exercise or Base Price	Grant Date Fair Value of Stock
Name	Grant Date	Threshold (\$)	Target (\$)	Maximum (\$)	Underlying Options (#)	of Option Awards(3) (\$)	and Option Awards(4) (\$)
Dr. Stephen A. Hill(1)	N/A	0	234,000	351,000			
	1/16/2007				150,000	6.16	546,165
	10/4/2007				320,000	4.63	94,898
	10/4/2007				40,000	20.06	11,163
	10/4/2007				80,000	10.00	151,197
	10/4/2007				40,000	13.62	76,715
	10/4/2007				60,000	3.08	41,304
	10/4/2007				150,000	5.36	291,959
	10/4/2007				125,000	6.31	378,470
	10/4/2007				150,000	5.73	499,951
	10/4/2007				150,000	6.16	562,593
Peter S. Lawrence	N/A	0	126,000	189,000			
	1/16/2007				50,000	6.16	182,055
	10/4/2007				100,000	7.56	408,710
Dr. Nigel J. Rulewski	N/A	0	114,000	171,000			
	1/16/2007		11.,000	1,1,000	50,000	6.16	182,055

- On October 4, 2007, in connection with an amendment to Dr. Hill's employment agreement, his stock options for 1,115,000 shares were modified so that if his agreement is terminated without cause, each option would remain fully exercisable until the sooner of (i) the tenth anniversary of its date of grant; or (ii) June 30, 2011. In this table the modified options have a grant date of October 4, 2007 (the date of modification). Originally, the options were granted from 1999 to 2007. The numbers of shares covered by the options and the exercise prices of the options remain unchanged.
- The threshold amount under the cash bonus program is zero. The target amount is based on the individual's current salary. The target represents 50% of Dr. Hill's base salary and 35% of the base salaries of Mr. Lawrence and Dr. Rulewski. The maximum amount is 150% of the target amount.
- Options granted under our Amended and Restated 1994 Equity Incentive Plan during 2007 had an exercise price equal to the closing price of our Common Stock reported by Nasdaq on the date of grant.
- (4)

 Reflects the dollar amount recognizable for financial reporting purposes in accordance with FAS 123(R). Assumptions used in the calculation of these amounts are included in Note 3 to our audited financial statements included in our 2007 Annual Report on Form 10-K.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table sets forth certain information with respect to the value of all unexercised options previously awarded to our named executive officers as of December 31, 2007:

Option Awards

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#)(1) Unexercisable	Option cise Price (\$)	Option Expiration Date
Dr. Stephen A. Hill(2)	320,000		\$ 4.63	4/1/2009
	40,000		20.06	3/16/2010
	80,000		10.00	3/22/2011
	40,000		13.62	6/30/2011
	60,000		3.08	6/30/2011
	112,500	37,500	5.36	6/30/2011
	62,500	62,500	6.31	6/30/2011
	37,500	112,500	5.73	6/30/2011
		150,000	6.16	6/30/2011
Peter S. Lawrence	75,000	225,000	6.20	4/13/2016
		50,000	6.16	1/16/2017
		100,000	7.56	10/4/2017
Dr. Nigel J. Rulewski	50,000	150,000	5.16	8/1/2016
DI. INIGOI V. RUICWSKI	50,000	50,000	6.16	1/16/2017

⁽¹⁾ Except as otherwise noted, each option vests at the rate of one-fourth of the underlying shares annually beginning on the anniversary of the date of grant.

OPTION EXERCISES AND STOCK VESTED IN FISCAL YEAR 2007

Our named executive officers did not exercise any options or have any restricted stock vest during the fiscal year ended December 31, 2007.

⁽²⁾ In accordance with the amendment to Dr. Hill's employment agreement dated October 4, 2007, if his agreement is terminated without cause, each of his options is fully exercisable until the sooner of (i) the tenth anniversary of its date of grant or (ii) June 30, 2011.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE IN CONTROL

The Company is party to employment agreements with three of its named executive officers. Each of the employment agreements provides for the payment of severance and change in control benefits. The following discussion and table provide information about the severance and change in control provisions of these employment agreements, and are qualified by reference to the full text of the agreements, each of which is on file with the SEC.

The following terms are used in the discussion below:

"Change in Control" means any of the following:

the acquisition by any person or entity of our Common Stock so that such person or entity holds or controls 50% or more of our outstanding Common Stock;

the merger or consolidation of the Company with or into any other entity in circumstances where the holders of the Company's outstanding shares of capital stock before the transaction do not retain stock representing a majority of the voting power of the surviving entity;

a sale of all or substantially all of the assets of the Company to a third party;

within any 24-month period, the election by the Company's stockholders of 20% or more of the Company's directors other than pursuant to nomination by management; or

the execution of an agreement approved by the Board providing for any of the above.

"Cause" means any of the following:

arbitrary, unreasonable, or willful failure of the executive to follow the reasonable instructions of the Chief Executive Officer (or, in the case of Dr. Hill, the Board), or otherwise perform his or her duties;

willful misconduct by the executive that is materially injurious to the Company;

willful commission by the executive of an act constituting fraud with respect to the Company;

conviction of the executive for a felony under state or federal law; or

material breach by the executive of his or her obligations to the Company regarding confidentiality of information, rights in intellectual property or, in the case of Dr. Hill, noncompetition.

Termination "without Cause" means any of the following:

the Company terminates the executive's employment without Cause; or

the executive terminates his employment upon the occurrence of any of the following: (a) the Company substantially reduces or diminishes the executive's responsibilities or title without cause; (b) the Company reduces the executive's base salary or bonus target (other than in connection with a Company-wide decrease in salary or bonus, respectively); (c) the Company materially breaches any of its obligations to the executive under his or her employment agreement, and fails to cure such breach; (d) the Company relocates the executive's place of employment without his or her consent by a distance of more than fifty (50) miles; or (e) a successor in interest to the Company fails to assume the obligations of the employment agreement.

Employment Agreement with Dr. Stephen A. Hill

Dr. Hill's employment agreement, as amended October 4, 2007, provides that the Company may terminate his employment without Cause upon not less than 52 weeks prior written notice. To the extent that Dr. Hill does not obtain other employment or consulting work during the 52-week notice period, he will continue during such period to receive his base salary, be eligible to receive an annual cash bonus based on the achievement of Company performance goals and be eligible to receive health and other employee benefits to which he is entitled under the terms of the employment agreement. Further, in the event that Dr. Hill's employment is terminated for any reason other than for Cause, any stock options that he has received over the course of his employment with the Company will continue to vest according to the schedule set forth in each option, without regard to his employment status. In addition, each option will remain fully exercisable until the sooner of (i) the tenth anniversary of the date of grant of that option, or (ii) June 30, 2011. During the 52-week notice period, Dr. Hill will not be required to report to work but will be required to be available for activities on behalf of the Company upon request of the Board.

In the event that Dr. Hill's employment is terminated without Cause within one year following a change in control, and he has not already accepted new employment or consulting work prior to the change in control, Dr. Hill will be entitled to a lump sum severance payment equal to two times his annual base salary as of the date of termination, plus an amount that is two times the average of the annual performance bonuses that he received in the preceding two years. In addition, the Company will pay, for the 12-month period following the date of termination, the cost of continuing the benefits that Dr. Hill is entitled to receive under his employment agreement at the level in effect as of the termination date. However, if any portion of Dr. Hill's severance payments or any other payment or benefit to be received by him would be subject to the excise tax imposed on "excess parachute payments" under Section 4999 of the Tax Code, then the aggregate amount of those payments and benefits will be reduced to the extent necessary so that no portion of the total amount is subject to the excise tax. Dr. Hill is entitled to specify which component(s) of the total amount will be reduced in order to avoid imposition of the excise tax.

On January 7, 2008, his agreement was again modified to provide that Dr. Hill would continue to serve as our President and Chief Executive Officer and a director until March 31, 2008, at which time he would resign from those positions, and would receive the payments and benefits provided for in his employment agreement, as amended, to the same extent as if a termination without Cause had occurred and the 52-week notice period described above had commenced on January 7, 2008. Because Dr. Hill became employed with another company on April 1, 2008, no payments or benefits were paid or will become payable to him under his employment agreement, as amended.

Employment Agreement with Peter S. Lawrence

Mr. Lawrence's employment agreement provides that, in the event that his employment is terminated without Cause, he is entitled, subject to the execution of a general release of claims, to a lump sum severance payment equal to 12 months' base salary as of the date of termination, plus the average of the annual performance bonuses that he received in the preceding two years. In addition, 50% of any then unvested options that were granted at the time that the employment agreement was executed will become immediately exercisable on the termination date, and the Company will pay, for the 12-month period following the date of termination, the cost of continuing the health and other employee benefits that Mr. Lawrence is entitled to receive under his employment agreement at the level in effect as of the termination date. The employment agreement further provides that, upon a change in control of the Company, all of any then unvested options held by Mr. Lawrence will become immediately exercisable as of the date of termination.

Employment Agreement with Dr. Nigel J. Rulewski

Dr. Rulewski's employment agreement provides that, in the event that his employment is terminated without Cause, he is entitled, subject to the execution of a general release of claims, to a lump sum severance payment equal to 12 months' base salary as of the date of termination, plus the average of the annual performance bonuses that he received in the preceding two years. In addition, 50% of any then unvested options that were granted at the time that the employment agreement was executed will become immediately exercisable on the termination date, and the Company will pay, for the 12-month period following the date of termination, the cost of continuing the benefits that Dr. Rulewski is entitled to receive under his employment agreement at the level in effect as of the termination date. If Dr. Rulewski's employment is terminated without Cause within one year after a change in control of the Company, in addition to the severance benefits described above, 100% of any then unvested options held by Dr. Rulewski will become immediately exercisable as of the date of termination.

The following table sets forth information with respect to compensation that would have been payable to Dr. Hill, Mr. Lawrence and Dr. Rulewski if the named executive officer's employment had been terminated without Cause as of December 31, 2007 immediately following a change in control of the Company:

Name	P	Cash Payment(1) (\$)	Equity Acceleration(2) (\$)	Benefits and Perquisites(3) (\$)	Total (\$)
Dr. Stephen A. Hill(4)	\$	1,408,468	\$ 24,375	\$ 22,358	\$ 1,455,201
Peter S. Lawrence		479,750		22,460	502,210
Dr. Nigel J. Rulewski		381,500	96,000	22,460	499,960

- For Dr. Hill, the cash payment is calculated as the sum of an amount equal to two times his annual salary as of December 31, 2007, plus an amount equal to two times the average of his 2006 and 2007 bonuses. For each of Mr. Lawrence and Dr. Rulewski, the cash payment is calculated as the sum of the executive's annual salary as of December 31, 2007, plus a bonus payment equal to the average of the executive's 2006 and 2007 bonuses
- (2) Reflects the aggregate intrinsic value of unvested stock options as of December 31, 2007. Aggregate intrinsic value represents the value for only those options which have an exercise price less than the market value of our stock on December 31, 2007.
- (3)

 Reflects the premiums for twelve months for group medical, dental, life and disability programs. Amounts are based on the premiums in effect at December 31, 2007.
- On January 7, 2008, the Board of Directors amended the employment agreement of Dr. Hill. Pursuant to the terms of this amendment, Dr. Hill continued to serve as President and Chief Executive Officer and a director of the Company until March 31, 2008, at which time he resigned from those positions.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table provides information as of December 31, 2007 regarding compensation plans (including individual compensation arrangements) under which our equity securities are authorized for issuance.

	(a)	(b)	(c)
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	4,477,862	\$ 6.78	2,816,549
Equity compensation plans not approved by security holders			
Total	4,477,862	\$ 6.78	2,816,549
	26		

REPORT OF THE AUDIT COMMITTEE

In the course of its oversight of the Company's financial reporting process, the Audit Committee of the Board of Directors has:

- reviewed and discussed with management the Company's audited financial statements for the fiscal year ended December 31, 2007;
- (ii) discussed with our independent registered public accountants, PricewaterhouseCoopers LLP, an independent registered public accounting firm, the matters required to be discussed by Statement on Auditing Standards No. 61, Communication with Audit Committees;
- (iii) received the written disclosures and the letter from PricewaterhouseCoopers LLP required by Independent Standards Board Standard No. 1, *Independence Discussions with Audit Committees*;
- (iv) discussed with PricewaterhouseCoopers LLP the firm's independence; and
- (v)
 considered whether the provision of non-audit services by PricewaterhouseCoopers LLP is compatible with maintaining independence.

Based on the foregoing review and discussions, the Committee recommended to the Board of Directors that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2007 for filing with the SEC.

By the Audit Committee, Timothy C. Barabe, Chairman William G. Messenger Patrick J. Zenner

PROPOSAL 2 AMENDMENTS TO OUR AMENDED AND RESTATED 1994 EQUITY INCENTIVE PLAN

General

We are asking our stockholders to approve amendments to our Amended and Restated 1994 Equity Incentive Plan, referred to as the Equity Plan, to:

increase the aggregate number of shares of Common Stock that may be issued under the plan by 2,400,000 shares, from 9,600,000 to 12,000,000 shares;

clarify the scope of employees eligible to receive Awards under the Equity Plan;

update sections of the Equity Plan relating to Incentive Stock Options to impose a limit on the number of shares that may be issued as Incentive Stock Options and to ensure compliance with changes to the Tax Code; and

make certain other editorial changes.

The following summary of the material terms of the Equity Plan, as proposed to be amended, is qualified by reference to the full text of the Equity Plan. A copy of the Equity Plan showing the proposed amendments is attached to this Proxy Statement as Appendix A. You may also request and obtain a copy by writing to:

ArQule, Inc. 19 Presidential Way Woburn, MA 01801 Attn.: William B. Boni

Vice President, Investor Relations/Corporate Communications.

Unless otherwise specified, capitalized terms used in this discussion have the meanings assigned to them in the Equity Plan.

The purpose of the Equity Plan is to attract and retain key employees and consultants and to provide an incentive for these persons to achieve long-range performance goals. The Equity Plan currently permits us to authorize the granting of "Awards" to our employees and consultants in any of the following forms:

options to purchase shares of the Company's Common Stock, which may be nonstatutory stock options or incentive stock options under the Tax Code;

stock appreciation rights, which give the holder the right to receive the difference between the fair market value per share the Company's Common Stock on the date of exercise over the grant price;

performance shares upon the attainment of specified performance goals;

restricted stock, which is subject to restrictions on transferability and subject to forfeiture on terms set by the Compensation Committee;

stock units, which represent the right to receive shares of the Company's Common Stock in the future, subject to terms, restrictions, conditions, performance criteria, vesting requirements and payment rules as set by the Compensation Committee;

other stock-based awards in the discretion of the Compensation Committee, including convertible preferred stock, convertible debentures, exchangeable securities and Common Stock awards or options.

To date, we have granted only incentive stock options, non-statutory stock options and restricted stock under the Equity Plan. Currently, we plan to issue only stock options and restricted stock under the Equity Plan but wish to retain the flexibility to make Awards in other forms.

On January 17, 2008, our Board of Directors voted to amend the Equity Plan, subject to stockholder approval, in order to increase the aggregate number of shares of Common Stock that may be issued under the plan by 2,400,000 shares from 9,600,000 to 12,000,000 shares. If the stockholders approve the proposed amendment, Awards may be granted under the Equity Plan for up to 12,000,000 shares of Common Stock, subject to adjustment for stock splits and similar capital changes. On April 10, 2008, the Compensation Committee approved the other amendments to the Equity Plan described above and reflected in Appendix A.

We last increased the number of shares of Common Stock reserved for issuance under the Equity Plan in May 2005. As of March 28, 2008, options to purchase an aggregate of 14,040,885 shares of Common Stock have been granted. Pursuant to the Equity Plan, 655,085 restricted shares of Common Stock have been awarded, of which 53,394 restricted shares have been cancelled, 503,325 shares have been issued as restrictions lapsed and 98,366 shares remain reserved for issuance if and when restrictions lapse. Options to purchase 6,313,653 shares have been cancelled, options to purchase 3,014,904 shares have been exercised, and options to purchase 4,712,328 shares remained outstanding, leaving 1,271,077 shares currently available for issuance of new options or restricted shares under the Equity Plan. The closing price of our Common Stock as reported by Nasdaq on March 28, 2008 was \$4.35.

The Company does not believe that the proposed amendments to the Equity Plan would have affected the number or types of Awards that were awarded for performance in 2007. Future grants are not presently determinable, and it is not possible to predict the benefits or amounts that will be received by or allocated to particular individuals or groups in 2008. However, if the amendments are not approved the total amount of options awarded may be curtailed. All shares available for grant under the Equity Plan can be used for Awards in the form of options, restricted stock, stock appreciation rights, performance shares, stock units, and other rights having a Common Stock element.

Administration and Eligibility

The selection of persons who receive Awards under the Equity Plan and the sizes and types of Awards are generally determined by the Compensation Committee. All of the Company's employees are eligible to participate in the Equity Plan. As of March 28, 2008, the Company had 113 employees. Consultants of the Company or any affiliate, who are capable of contributing significantly to the successful performance of the Company, are also eligible to participate in the Equity Plan, but only for Awards other than incentive stock options.

Options under the Equity Plan are granted at the discretion of the Compensation Committee. The Compensation Committee determines the recipients and establishes the terms and conditions of each Award. In the case of stock options, the terms and conditions include the exercise price, the form of payment of the exercise price, the number of shares subject to the option, and the dates at which the option becomes exercisable. However, the exercise price of any incentive stock option granted under the Equity Plan may not be less than the fair market value of the Common Stock on the date of grant and the term of any such option cannot be greater than 10 years. The Compensation Committee determines the exercise price of any non-statutory stock option. In the case of restricted stock, the terms and conditions include the restrictions on ownership and the dates upon which the restrictions lapse.

Subject to certain limitations, the Compensation Committee may delegate to one or more of our executive officers the power to make Awards to participants who are not subject to Section 16 of the Exchange Act or "covered employees" for purposes of Section 162(m) of the Tax Code. In July 2001,

the Compensation Committee first granted such authority to Dr. Hill. In 2007, the Compensation, Committee reaffirmed that authority for Dr. Hill and granted it to Mr. Lawrence. In 2008, it reaffirmed the authority for both Dr. Hill and Mr. Lawrence.

Federal Income Tax Consequences Relating to Stock Options

The following discussion briefly summarizes certain federal income tax consequences of Awards under the Equity Plan and does not attempt to describe all possible federal or any foreign, state, local, or other tax consequences related to Awards or tax consequences based upon particular circumstances.

Incentive Stock Options. A participant who is granted an incentive stock option will not recognize income on the grant or exercise of the option. However, the difference between the exercise price and the fair market value of the stock on the date of exercise is an adjustment item for purposes of the alternative minimum tax. If a participant does not exercise an incentive stock option within certain specified periods after termination of employment, the participant will recognize ordinary income on the exercise of the incentive stock option in the same manner as on the exercise of a non-statutory stock option, as described below.

Non-statutory Stock Options. A participant generally is not required to recognize income on the grant of a non-statutory stock option. Generally, ordinary income is instead required to be recognized on the date the non-statutory stock option is exercised. In general, the amount of ordinary income required to be recognized is the excess, if any, of the fair market value of the shares of Common Stock on the date of exercise over the exercise price.

Restricted Stock. Shares of restricted stock awarded under the Equity Plan will be subject to a substantial risk of forfeiture for the period of time specified in the Award. Generally, unless participants who are granted shares of restricted stock makes an election under Section 83(b) of the Tax Code as described below, they are not required to recognize ordinary income on the award of restricted stock. Instead, on the date that the substantial risk of forfeiture lapses, participants will be required to recognize ordinary income in an amount equal to the excess, if any, of the fair market value of the shares of restricted stock on such date over the amount, if any, paid for such shares. If a participant makes a Section 83(b) election to recognize ordinary income on the date the shares of restricted stock are awarded, the amount of ordinary income required to be recognized is an amount equal to the excess, if any, of the fair market value of the shares on the date of award over the amount, if any, paid for such shares. In which case, the participant will not be required to recognize additional ordinary income when the substantial risk of forfeiture lapses.

Stock Appreciation Rights, Performance Shares, Stock Units and Other Stock Based Awards. A participant generally is not required to recognize income on the grant of a stock appreciation right, an award of performance shares, an award of stock units, or any other stock based award. Generally, ordinary income is instead required to be recognized upon the issuance of shares and/or cash pursuant to the terms of the award. In general, the amount of ordinary income required to be recognized is the excess, if any, of the amount of cash and the fair market value of any shares received, over the amount, if any, paid for the Award.

Gain or Loss on Sale or Exchange of Shares. In general, gain or loss from the sale or exchange of shares of Common Stock granted or awarded under the Equity Plan will be treated as capital gain or loss, if the shares are held as capital assets at the time of the sale or exchange. However, if certain holding period requirements are not satisfied at the time of a sale or exchange of shares of Common Stock acquired upon exercise of an incentive stock option (a "disqualifying disposition"), a participant generally will be required to recognize ordinary income upon such disposition.

Deductibility by Company. Generally, the Company is not allowed a deduction in connection with the grant or exercise of an incentive stock option. However, if a participant is required to recognize ordinary income as a result of a disqualifying disposition, the Company will be entitled to a deduction equal to the amount of ordinary income so recognized. In general, for a non-statutory stock option (including an incentive stock option that is treated as a non-statutory stock option, as described above), a restricted stock award, a stock appreciation right, a performance shares award, a stock units award, or any other stock-based award, the Company will be allowed to deduct the amount of ordinary income recognized by the participant. In either case, the Company's deduction is subject to the disallowance rules under Section 162(m) of the Tax Code.

Tax Rules Affecting Nonqualified Deferred Compensation Plans. Awards under the Equity Plan may be subject to federal income tax rules that apply to "nonqualified deferred compensation plans" under the American Jobs Creation Act of 2004, which became effective on January 1, 2005. Failure to comply with the rules or to qualify for an exemption in respect of an Award could result in significant adverse tax results to the grantee of such Award. These include immediate taxation of the Award upon vesting, immediate taxation upon vesting of the grantee's awards under certain other plans, a penalty tax of 20 percent of the amount of income so recognized, and a special interest payment. The Equity Plan is designed to allow, but does not require, the grant of Awards which are intended to comply with the deferred compensation rules or qualify for an exemption.

Parachute Payments. Usually, if payments to certain persons that are contingent on a change in control exceed limits specified in the Tax Code ("parachute payments"), the recipient is liable for a 20 percent excise tax on a specified portion of such payments. Generally, the corporation or other entity making the parachute payment is not entitled to any deduction for a specified portion of such payments as well. If the exercise date of an option granted, or the vesting date of restricted stock awarded, or the vesting or payment date of any other Award under the Equity Plan is accelerated by a change in control of the Company, such acceleration would be relevant in determining whether the excise tax and deduction disallowance rules would be triggered.

Vote Required

The affirmative vote of a majority of the total votes cast by the stockholders present at the meeting, in person or by proxy, and entitled to vote on this proposal is needed to approve the amendments to the Equity Plan. If you submit a proxy without direction as to a vote on this matter, your proxy will be treated as a vote "FOR" this proposal. Broker non-votes will not be treated as votes cast and will have no effect on the outcome of the vote on this proposal. Abstentions will be treated as a vote against this proposal.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

PROPOSAL 3 RATIFICATION OF THE SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

We are asking our stockholders to ratify the selection by our Audit Committee of PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit our financial statements for the fiscal year ending December 31, 2008. PricewaterhouseCoopers LLP has audited our accounts since our inception.

The Audit Committee of our Board of Directors selected PricewaterhouseCoopers LLP to audit our financial statements for the year ending December 31, 2008. We expect that representatives of PricewaterhouseCoopers LLP will attend our 2008 Annual Meeting of Stockholders to respond to appropriate questions. They will also have the opportunity to make a statement if they so desire.

The following table summarizes fees for services provided by PricewaterhouseCoopers LLP to us in 2007 and 2006:

	2007		2006	
		_		
Audit Fees	\$ 502,000	\$	535,400	
Audit-Related Fees	\$ 53,000			
Tax Fees				
All Other Fees				
Total	\$ 555,000	\$	535,400	

[&]quot;Audit Fees" are fees for the audit of our consolidated financial statements and internal controls over financial reporting, included in our Annual Reports on Form 10-K, the review of interim financial statements included in our Quarterly Reports on Form 10-Q and other services normally associated with statutory and regulatory filings or engagements.

"Audit-Related Fees" are fees for assurance and related services that are reasonably related to the performance of the audit and the review of ArQule's financial statements and which are not reported under "Audit Fees." In 2007, these services related to consultations with respect to the implementation of new accounting standards and to accounting for a business collaboration.

The Audit Committee pre-approves each proposed service by PricewaterhouseCoopers LLP on a case-by-case basis. The Audit Committee does not have any pre-approval policies or procedures for PricewaterhouseCoopers LLP's services. The Audit Committee approved 100% of the audit and audit-related services PricewaterhouseCoopers LLP provided to us in 2006 and 2007.

Vote Required

The affirmative vote of a majority of the total votes cast by the stockholders present at the meeting, in person or by proxy, and entitled to vote on this proposal is necessary to ratify the selection of PricewaterhouseCoopers LLP to audit our financial statements. If you submit a proxy without direction as to a vote on this matter, your proxy will be treated as a vote "FOR" this proposal. Broker non-votes will not be treated as votes cast and will have no effect on the outcome of the vote on this proposal. Abstentions will be treated as votes against this proposal.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

There are no amounts due to or from related parties as of December 31, 2006 or revenue from related parties in 2006. In January 2007, we entered into a \$5.0 million, eight-month sponsored research agreement with the newly established Boston Biomedical, Inc. ("BBI"), an independent corporation led by Chiang J. Li, our former chief scientific officer. BBI conducts scientific research under the agreement that includes a number of *in vivo* and *in vitro* studies, reports and publications related to mechanisms of action and biomarkers for our lead products, which are in clinical trials. As of December 31, 2007, there was \$318,000 due to BBI under the agreement, and no amounts due to us from any related party.

SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The following table and footnotes set forth certain information regarding the beneficial ownership of the Company's Common Stock as of March 28, 2008 by persons known by us to be beneficial owners of more than 5% of our Common Stock. We had approximately 43,772,126 shares of Common Stock outstanding on March 28, 2008.

Name	Common Stock Owned	Options to Purchase Common Stock	Total Stock and Stock-based Holdings	Percent of Class
Barclays Global Investors, NA.(1) 45 Fremont Street San Francisco, CA 94105	2,268,058		2,268,058	5.19%
Biotechnology Value Fund, L.P.(2) 900 North Michigan Avenue, Suite 1100 Chicago, IL 60611	10,162,060		10,162,060	23.3%
OrbiMed Advisors LLC(3) 767 Third Avenue, 30th Floor New York, New York 10017	2,531,100		2,531,100	5.79%
Pfizer Inc(4) 235 East 42nd Street New York, New York 10017	3,273,679		3,273,679	7.4%
Mr. Joseph Edelman(5) c/o First New York Securities, LLC 850 Third Avenue, 8 th Floor New York, NY 10022	2,260,000		2,260,000	6.31%
Great Point Partners, LLC(6) 165 Mason Street, 3 rd Floor Greenwich, CT 06830	2,821,383		2,821,383	6.45%

(1)
These shares are beneficially owned by a group consisting of Barclays Global Investors, NA., Barclays Global Fund Advisors,
Barclays Global Investors, Ltd., Barclays Global Investors Japan Trust and Banking Company Limited, Barclays Global Investors
Japan Limited, Barclays Global Investors Canada Limited, Barclays Global Investors Australia Limited, and Barclays Global Investors
(Deutschland) AG, based on the Schedule 13G filed with the SEC on February 5, 2008 by Barclays Global Investors, NA. The
percentage of ownership is calculated as of the filing date of the Schedule 13G.

- These shares are beneficially owned by a group consisting of Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., BVF Investments, L.L.C., Investment 10, L.L.C., BVF Partners L.P. and BVF Inc., based on the Schedule 13G filed with the SEC on March 13, 2008 by Biotechnology Value Fund, L.P. Pursuant to the operating agreement of BVF Investments, L.L.C., BVF Partners L.P. is authorized, among other things, to invest the funds of Ziff Asset Management, L.P., the majority member of BVF Investments, L.L.C., in shares of the Common Stock beneficially owned by BVF Investments, L.L.C. and to vote and exercise dispositive power over those shares of Common Stock BVF Partners L.P. and BVF Inc. share voting and dispositive power over shares of Common Stock beneficially owned by Biotechnology Value Fund, L.P., Biotechnology Value Fund II, BVF Investments, L.L.C., and Investment 10, L.L.C., on whose behalf BVF Partners L.P. acts as an investment manager and, accordingly, BVF Partners L.P. and BVF Inc. have beneficial ownership of all of the shares of Common Stock owned by such parties. The percentage of ownership is calculated as of the filing date of the Schedule 13D.
- These shares are held by OrbiMed Advisors LLC and OrbiMed Capital LLC on behalf of Caduceus Capital Master Fund Limited (527,400 shares), Caduceus Capital II, L.P. (346,500 shares), UBS Eucalyptus Fund, LLC (351,700 shares), PW Eucalyptus Fund, Ltd. (42,400 shares), Summer Street Life Sciences Hedge Fund Investors LLC (134,200 shares), Knightsbridge Post Venture IV L.P. (109,800 shares), Knightsbridge Integrated Holdings, V, LP (178,400 shares), Knightsbridge Netherlands II, L.P. (49,100 shares), Knightsbridge Netherlands III LP (67,100 shares), Knightsbridge Venture Capital VI, L.P. (74,500 shares), and Biotech Growth Trust plc (650,000 shares), based on a Schedule 13G filed with the SEC on February 14, 2008. Mr. Samuel D. Isaly is a control person. The percentage of ownership is calculated as of the filing date of the Schedule 13G.
- (4)
 These shares (issued to Pfizer Holdings Europe, Latouche House, International Financial Services Centre, Dublin 1, Ireland, a subsidiary of Pfizer Inc) are beneficially owned by Pfizer Inc based on the Schedule 13D filed with the SEC on February 14, 2006 by Pfizer Inc. The percentage of ownership is calculated as of March 28, 2008.
- These shares, comprised of 2,146,825 shares held by Perceptive Life Sciences Master Fund Ltd., a Cayman Islands Company of which the investment manager is Perceptive Advisors LLC, a Delaware limited liability company of which Mr. Edelman is managing member, are beneficially owned by Joseph Edelman, based on the Schedule 13G filed by him on February 8, 2007. The percentage of ownership is calculated as of the filing date of the Schedule 13G.
- These shares, comprised of 1,523,546 shares held by Biomedical Value Fund. L.P., and 1,297,837 shares held by Biomedical Offshore Value Fund, Ltd. of which the investment manager is Great Point Partners LLC, a Delaware limited liability company, based on the Schedule 13G filed with the SEC on March 20, 2008. The percentage of ownership is calculated as of the filing date of the Schedule 13G.

SHARE OWNERSHIP OF MANAGEMENT

The following table and footnotes set forth certain information regarding the beneficial ownership of the Company's Common Stock as of March 28, 2008 by (i) our directors and nominees for election as director, (ii) our named executive officers, and (iii) all current directors and named executive officers and as a group. Shares of Common Stock underlying options includes shares for which options are currently exercisable or will become exercisable within 60 days after March 28, 2008. Those options are deemed to be outstanding for computing the percentage of the person or group holding such options, but are not deemed outstanding for computing the percentage of any other person or group. The

address for individuals for whom an address is not otherwise indicated is 19 Presidential Way, Woburn MA 01801-5140.

Common Stock Owned	Options to Purchase Common Stock	Total Stock and Stock-based Holdings	Percent of Class
14,801	46,000	60,801	*
	30,000	30,000	*
2,591	16,667	19,258	*
1,500	35,000	36,500	*
	26,667	26,667	*
	52,500	52,500	*
15,268	896,250	911,518	2.1%
	162,500	162,500	*
1,498	62,500	63,998	*
300	5,000	5,300	*
35,958	1,333,084	1,369,042	3.1%
	14,801 2,591 1,500 15,268 1,498 300	Stock Owned Purchase Common Stock 14,801 46,000 30,000 2,591 16,667 1,500 26,667 52,500 52,500 162,500 1,498 62,500 300 300 5,000	Common Stock Owned Options to Purchase Common Stock and Stock-based Holdings 14,801 46,000 60,801 30,000 30,000 2,591 16,667 19,258 1,500 35,000 36,500 26,667 26,667 26,667 52,500 52,500 52,500 15,268 896,250 911,518 162,500 162,500 1,498 300 5,000 5,300

- Indicates less than 1%.
- (1)

 The persons named in the table have sole voting and investment power with respect to the shares beneficially owned by them, except as noted below or as otherwise provided under community property laws. Total Stock and Stock-based Holdings numbers include shares of Common Stock issuable pursuant to outstanding options that may be exercised within 60 days after March 28, 2008.
- (2)
 Mr. Barabe disclaims any direct, indirect or beneficial ownership of 420 shares of Common Stock owned by his spouse and 2,000 shares of Common Stock owned by his adult children.
- On September 1, 2007, we entered into a consulting agreement with Mr. Woodrich. Pursuant to the terms of the consulting agreement, Mr. Woodrich received a grant of 15,000 stock options on September 1, 2007 vesting at the rate of 1,250 shares per month over the duration of his contract. The contract with Mr. Woodrich was terminated in January 2008, at which point 5,000 shares were fully vested.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our executive officers and directors are required under Section 16(a) of the Exchange Act to file reports of ownership and changes in ownership of our securities with the SEC. Copies of those reports must also be furnished to us, unless we and the person reporting have agreed that we will file on his or her behalf pursuant to a power of attorney. We file reports required under Section 16(a) on behalf of our executive officers and directors pursuant to powers of attorney.

Based solely on a review of the copies of reports furnished to, or filed by, us and written representations that no other reports were required, we believe that during 2007 our executive officers and directors complied with all applicable Section 16(a) filing requirements.

STOCKHOLDER PROPOSALS

If you wish to bring business before the 2009 Annual Meeting of Stockholders and have your proposal included in the proxy statement and card for that meeting, you must give written notice to ArQule by December 15, 2008, provided that the 2009 Annual Meeting of Stockholders is within 30 days of May 15, 2008 (the date 120 days before the anniversary of the date the 2008 proxy statement was mailed to stockholders).

If you intend to bring such a proposal at the 2009 Annual Meeting outside the SEC's stockholder proposal rules, or wish to propose a director nomination at the 2009 Annual Meeting, you must provide written notice to ArQule of such proposal or nomination by March 1, 2009 (the date 75 days before the anniversary of the 2008 Annual Meeting).

Notices of stockholder proposals and nominations should be given in writing to:

Peter S. Lawrence
President and Chief Operating Officer
ArQule, Inc.
19 Presidential Way
Woburn, Massachusetts, 01801

OTHER MATTERS

Our Board of Directors does not know of any business to come before the Annual Meeting other than the matters described in the Notice of Annual Meeting. If other business is properly presented for consideration at the meeting, the enclosed proxy authorizes the persons named therein to vote the shares represented thereby in their discretion.

A copy of our Annual Report on Form 10-K for the year ended December 31, 2007, as filed with the SEC on March 17, 2008, accompanies this Proxy Statement. Any exhibit to Form 10-K is also available upon written request at a reasonable charge for copying and mailing. Written requests should be addressed to:

William B. Boni
Vice President, Investor Relations/Corporate Communications
ArQule, Inc.
19 Presidential Way
Woburn, Massachusetts 01801

Copies of these documents may also be accessed electronically by means of the SEC's website at http://www.sec.gov. The Annual Report on Form 10-K is not part of the proxy solicitation materials.

Appendix A

ARQULE, INC. Amended and Restated 1994 Equity Incentive Plan

Section 1. Purpose

The purpose of the Plan is to attract and retain key employees and consultants of the Company and its Affiliates, to provide an incentive for them to achieve long-range performance goals, and to enable them to participate in the long-term growth of the Company. Independent contractors and leased employees of the Company shall not be eligible to participate in the Plan notwithstanding that they may be deemed to be "common law" employees of the Company for other purposes.

Section 2. Definitions

"Affiliate" means any business entity that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with the Company. For purposes hereof, "Control" (and with correlative meanings, the terms "controlled by" and "under common control with") shall mean the possession of the power to direct or cause the direction of the management and policies of the Company, whether through the ownership of voting stock, by contract or otherwise. In the case of a corporation "control" shall mean, among other things, the direct or indirect ownership of more than fifty percent (50%) of its outstanding voting stock. In the case of an Incentive Stock Option, the term "Affiliate" shall notonly include anyeach entity which is not either a "parent corporation" or a "subsidiary corporation," both as defined in Section 424 of the Code, with respect to the Company (and any entity which becomes such a "parent corporation" or "subsidiary corporation" after the adoption of the Plan).

"Award" means any Option, Stock Appreciation Right, Performance Share, Restricted Stock, Stock Unit or Other Stock-Based Award awarded under the Plan or any Award previously granted under the 1994 Equity Incentive Plan of the Company or the Amended and Restated 1994 Equity Incentive Plan of the Company as in effect prior to date this Plan was adopted by the Board of Directors.

"Board" means the Board of Directors of the Company.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and any successor to such Code.

"Committee" means a committee of not fewer than two members of the Board appointed by the Board to administer the Plan. If a Committee is authorized to grant Options to a Reporting Person or a "covered employee" within the meaning of Section 162(m) of the Code, each member shall be a "non-employee director" or the equivalent within the meaning of Rule 16b-3 under the Securities Exchange Act of 1934 and an "outside director" or the equivalent within the meaning of Section 162(m) of the Code, respectively. Until such committee is appointed, "Committee" means the Board.

"Common Stock" or "Stock" means the Common Stock, \$0.01 par value, of the Company.

"Company" means ArQule, Inc.

"Designated Beneficiary" means the beneficiary designated by a Participant, in a manner determined by the Committee, to receive amounts due or exercise rights of the Participant in the event of the Participant's death. In the absence of an effective designation of a beneficiary by a Participant, "Designated Beneficiary" shall mean (i) the Participant's estate, if such amounts or rights are, under

applicable law, deemed to be part of the Participant's estate, or (ii) such person who acquired the right to receive amounts due or exercise rights of the Participant by bequest or inheritance.

"Effective Date" means October 28, 1994.

"Fair Market Value" means, with respect to Common Stock or any other property, the fair market value of such property as determined by the Committee in good faith or in the manner established by the Committee from time to time.(1)

(1)
On January 16, 2007, the Board determined that the Fair Market Value of a share of Common Stock shall be its closing price on the NASDAQ National Market on the date an Award is made.

"Incentive Stock Option" means an option to purchase shares of Common Stock awarded to a Participant under Section 6 that is intended to meet the requirements of Section 422 of the Code or any successor provision and is designated by the Committee as such.

"Nonstatutory Stock Option" means an option to purchase shares of Common Stock awarded to a Participant under Section 6 that is not intended to be an Incentive Stock Option.

"Option" means an Incentive Stock Option or a Nonstatutory Stock Option.

"Other Stock-Based Award" means an Award, other than an Option, Stock Appreciation Right, Performance Share, Restricted Stock or Stock Unit, having a Common Stock element and awarded to a Participant under Section 11.

"Participant" means, subject to Section 4 hereof, a person selected by the Committee to receive an Award under the Plan.

"Performance Cycle" or "Cycle" means the period of time selected by the Committee during which performance is measured for the purpose of determining the extent to which an award of Performance Shares has been earned.

"Performance Shares" mean shares of Common Stock, which may be earned by the achievement of performance goals, awarded to a Participant under Section 8.

"Reporting Person" means a person subject to Section 16 of the Securities Exchange Act of 1934 or any successor provision.

"Restricted Period" means the period of time selected by the Committee during which an Award may be forfeited to the Company pursuant to the terms and conditions of such Award.

"Restricted Stock" means shares of Common Stock subject to forfeiture awarded to a Participant under Section 9.

"Stock Appreciation Right" or "SAR" means a right to receive any excess in value of shares of Common Stock over the exercise price awarded to a Participant under Section 7.

"Stock Unit" means an award of Common Stock or units that are valued in whole or in part by reference to, or otherwise based on, the value of Common Stock, awarded to a Participant under Section 10.

"Ten-Percent Stockholder" shall mean a Participant who, at the time of grant of an Incentive Stock Option, owns, applying Section 424(d) of the Code, stock possessing more than ten percent of the total combined voting power of all classes of stock of the Company or a "parent corporation" or "subsidiary corporation" (both as defined in Section 424 of the Code) with respect to the Company.

Section 3. Administration

The Plan shall be administered by the Committee. The Committee shall have authority and discretion to adopt, alter and repeal such administrative rules, guidelines and practices governing the

operation of the Plan as it shall from time to time consider advisable, to interpret the provisions of the Plan, subject to the provisions of the Plan, to grant Awards to Participants and determine the terms of all such Awards, to determine the identity of a Participant's Designated Beneficiary and to determine the identity of a Participant's (or Designated Beneficiary's) legal representative in the event such person becomes legally disabled. The Committee's decisions shall be final and binding. To the extent permitted by applicable law, the Committee may delegate to one or more executive officers of the Company the power to make Awards to Participants who are not Reporting Persons or covered employees and all determinations under the Plan with respect thereto, provided that the Committee shall fix the maximum amount of such Awards for all such Participants and a maximum for any one Participant.

Section 4. Eligibility

All employees (but excluding any independent contractor or leased employee who is deemed to be a "common law" employee of the Company or any Affiliate) and, in the case of Awards other than Incentive Stock Options, any consultant of the Company or any Affiliate, capable of contributing significantly to the successful performance of the Company, other than a person who has irrevocably elected not to be eligible, are eligible to be Participants in the Plan.

Section 5. Stock Available for Awards

- Subject to adjustment under subSection (b), Awards subsection (b), the maximum number of shares of Common Stock that may be made issued under the Plan for up to 9,600,000 is 12,000,000 shares of Common Stock. If any Award in respect of shares of Common Stock expires or is terminated unexercised or is forfeited without the Participant having had the benefits of ownership (other than voting rights), the shares subject to such Award, to the extent of such expiration, termination or forfeiture, shall again be available for award under the Plan. Common Stock issued through the assumption or substitution of outstanding grants from an acquired company shall not reduce the shares available for Awards under the Plan to the extent permitted under Section 422 of the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.
- In the event that the Committee determines that any stock dividend, extraordinary cash dividend, creation of a class of equity securities, recapitalization, reorganization, merger, consolidation, split-up, spin-off, combination, exchange of shares, warrants or rights offering to purchase Common Stock at a price substantially below fair market value, or other similar transaction affects the Common Stock such that an adjustment is required or desirable in order to preserve the benefits or potential benefits intended to be made available under the Plan, then the Committee (subject, in the case of Incentive Stock Options, to any limitation required under the Code) may in its discretion equitably adjust any or all of, or provide substitution for, (i) the number and kind of shares in respect of which Awards may be made under the Plan, (ii) the number and kind of shares subject to outstanding Awards, and (iii) the award, exercise or conversion price with respect to any of the foregoing, and if considered appropriate, the Committee may make provision for a cash payment with respect to an outstanding Award, provided that the number of shares subject to any Award shall always be a whole number.

Section 6. Stock Options

(a)
Subject to the provisions of the Plan, the Committee may award Incentive Stock Options and Nonstatutory Stock Options and determine the number of shares to be covered by each Option, the option price therefor and the conditions and limitations applicable to the exercise of the Option. The terms and conditions of Incentive Stock Options shall be subject to and comply with Section 422 of the Code or any successor provision and any regulations

thereunder, and no Incentive Stock Option may be granted hereunder more than ten years after May 19, 2004. (2)

- (2)
 This Plan was amended by the Board with subsequent stockholder approval to extend the period during which Incentive Stock Option may be granted to ten years after May 19, 2004, the date of the 2004 Annual Meeting of Stockholders of the Company.
 - (b)

 The Committee shall establish the option price at the time each Option is awarded, which price in the case of an Incentive

 Stock Option shall not be less than 100% (110% in the case of a Ten-Percent Stockholder) of the Fair Market Value of the

 Common Stock on the date of award with respect to Incentive Stock Options. Nonstatutory Stock Options may be granted at such prices as the Committee may determine.
 - Each Option shall be exercisable at such times and subject to such terms and conditions as the Committee may specify in the applicable Award or thereafter, provided, however, that an Incentive Stock Option may not be exercised more than ten years (five years in the case of a Ten-Percent Stockholder) from the date of award. The Committee may impose such conditions with respect to the exercise of Options, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable.
 - No shares shall be delivered pursuant to any exercise of an Option until payment in full of the option price therefor is received by the Company. Such payment may be made in whole or in part in cash or (A) to the extent permitted by the Committee at or after the award of the Option, by delivery (i) of a note or (ii) shares of Common Stock owned by the optionee, including, if vested, shares of Restricted Stock, or by (B) to the extent permitted under the terms of the written agreement evidencing the grant of an Option, by (i) retaining shares otherwise issuable pursuant to the Option, in each case valued at their Fair Market Value on the date of delivery or retention, or (ii) such other lawful consideration as the Committee may determine.
 - (e)

 The Committee may provide that, subject to such conditions as it considers appropriate, upon the delivery or retention of shares to the Company in payment of an Option, the Participant automatically be awarded an Option for up to the number of shares so delivered.

Section 7. Stock Appreciation Rights

- Subject to the provisions of the Plan, the Committee may award SARs in tandem with an Option (at or after the award of the Option), or alone and unrelated to an Option. SARs in tandem with an Option shall terminate to the extent that the related Option is exercised, and the related Option shall terminate to the extent that the tandem SARs are exercised. SARs granted in tandem with Options shall have an exercise price not less than the exercise price of the related Option. SARs granted alone and unrelated to an Option may be granted at such exercise prices as the Committee may determine.
- (b)

 An SAR related to an Option, which SAR can only be exercised upon or during limited periods following a change in control of the Company, may entitle the Participant to receive an amount based upon the highest price paid or offered for Common Stock in any transaction relating to the change in control or paid during the thirty-day period immediately preceding the occurrence of the change in control in any transaction reported in the stock market in which the Common Stock is normally traded.

Section 8. Performance Shares

(a)
Subject to the provisions of the Plan, the Committee may award Performance Shares and determine the number of such shares for each Performance Cycle and the duration of each Performance Cycle. There may be more than one Performance Cycle in existence at any one

time, and the duration of Performance Cycles may differ from each other. The payment value of Performance Shares shall be equal to the Fair Market Value of the Common Stock on the date the Performance Shares are earned or, in the discretion of the Committee, on the date the Committee determines that the Performance Shares have been earned.

- (b)

 The Committee shall establish performance goals for each Cycle, for the purpose of determining the extent to which Performance Shares awarded for such Cycle are earned, on the basis of such criteria and to accomplish such objectives as the Committee may from time to time select. During any Cycle, the Committee may adjust the performance goals for such Cycle as it deems equitable in recognition of unusual or non-recurring events affecting the Company, changes in applicable tax laws or accounting principles, or such other factors as the Committee may determine.
- As soon as practicable after the end of a Performance Cycle, the Committee shall determine the number of Performance Shares that have been earned on the basis of performance in relation to the established performance goals. The payment values of earned Performance Shares shall be distributed to the Participant or, if the Participant has died, to the Participant's Designated Beneficiary, as soon as practicable thereafter. The Committee shall determine, at or after the time of award, whether payment values will be settled in whole or in part in cash or other property, including Common Stock or Awards.

Section 9. Restricted Stock

- (a)
 Subject to the provisions of the Plan, the Committee may award shares of Restricted Stock and determine the duration of the Restricted Period during which, and the conditions under which, the shares may be forfeited to the Company and the other terms and conditions of such Awards. Shares of Restricted Stock may be issued for no cash consideration or such minimum consideration as may be required by applicable law.
- (b)
 Shares of Restricted Stock may not be sold, assigned, transferred, pledged or otherwise encumbered, except as permitted by the Committee, during the Restricted Period. Shares of Restricted Stock shall be evidenced in such manner as the Committee may determine. Any certificates issued in respect of shares of Restricted Stock shall be registered in the name of the Participant and unless otherwise determined by the Committee, deposited by the Participant, together with a stock power endorsed in blank, with the Company. At the expiration of the Restricted Period, the Company shall deliver such certificates to the Participant or if the Participant has died, to the Participant's Designated Beneficiary.

Section 10. Stock Units

- (a) Subject to the provisions of the Plan, the Committee may award Stock Units subject to such terms, restrictions, conditions, performance criteria, vesting requirements and payment rules as the Committee shall determine.
- (b)
 Shares of Common Stock awarded in connection with a Stock Unit Award shall be issued for no cash consideration or such minimum consideration as may be required by applicable law.

Section 11. Other Stock-Based Awards

Subject to the provisions of the Plan, the Committee may make other awards of Common Stock and other awards that are valued in whole or in part by reference to, or are otherwise based on, Common Stock, including without limitation convertible preferred stock, convertible debentures, exchangeable securities and Common Stock awards or options. Other Stock-Based Awards may be granted either alone or in tandem with other Awards granted under the Plan and/or cash awards made outside of the Plan.

(b)

The Committee may establish performance goals, which may be based on performance goals related to book value, subsidiary performance or such other criteria as the Committee may determine, Restricted Periods, Performance Cycles, conversion prices, maturities and security, if any, for any Other Stock-Based Award. Other Stock-Based Awards may be sold to Participants at the face value thereof or any discount therefrom or awarded for no consideration or such minimum consideration as may be required by applicable law.

Section 12. General Provisions Applicable to Awards

- (a)

 Documentation. Each Award under the Plan shall be evidenced by a writing delivered to the Participant specifying the terms and conditions thereof and containing such other terms and conditions not inconsistent with the provisions of the Plan as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with applicable tax and regulatory laws and accounting principles.
- (b)

 Committee Discretion. Each type of Award may be made alone, in addition to or in relation to any other type of Award. The terms of each type of Award need not be identical, and the Committee need not treat Participants uniformly. Except as otherwise provided by the Plan or a particular Award, any determination with respect to an Award may be made by the Committee at the time of award or at any time thereafter.
- (c)

 Settlement. The Committee shall determine whether Awards are settled in whole or in part in cash, Common Stock, other securities of the Company, Awards or other property. The Committee may permit a Participant to defer all or any portion of a payment under the Plan, including the crediting of interest on deferred amounts denominated in cash and dividend equivalents on amounts denominated in Common Stock.
- (d)

 Dividends and Cash Awards. In the discretion of the Committee, any Award under the Plan may provide the Participant with (i) dividends or dividend equivalents payable currently or deferred with or without interest, and (ii) cash payments in lieu of or in addition to an Award.
- (e) *Termination of Employment.* The Committee shall determine the effect on an Award of the disability, death, retirement or other termination of employment of a Participant and the extent to which, and the period during which, the Participant's legal representative, guardian or Designated Beneficiary may receive payment of an Award or exercise rights thereunder.
- Change in Control. In order to preserve a Participant's rights under an Award in the event of a change in control of the Company, the Committee in its discretion may, at the time an Award is made or at any time thereafter, take one or more of the following actions: (i) provide for the acceleration of any time period relating to the exercise or realization of the Award, (ii) provide for the purchase of the Award upon the Participant's request for an amount of cash or other property that could have been received upon the exercise or realization of the Award had the Award been currently exercisable or payable, (iii) adjust the terms of the Award in a manner determined by the Committee to reflect the change in control, (iv) cause the Award to be assumed, or new rights substituted therefor, by another entity, or (v) make such other provision as the Committee may consider equitable and in the best interests of the Company.
- Withholding Taxes. The Participant shall pay to the Company, or make provision satisfactory to the Committee for payment of, any taxes required by law to be withheld in respect of Awards under the Plan no later than the date of the event creating the tax liability. The Company's obligation to issue or deliver shares of Common Stock or pay any amount pursuant to any Award shall be subject to the Participant's satisfaction of his or her obligations under the preceding sentence. In the Committee's discretion, such tax obligations may be paid in whole or in part in shares of Common Stock, including shares retained from

the Award creating the tax obligation, valued at their Fair Market Value on the date of delivery. The Company and its Affiliates may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to the Participant.

- (h) Foreign Nationals. Awards may be made to Participants who are foreign nationals or employed outside the United States on such terms and conditions different from those specified in the Plan as the Committee considers necessary or advisable to achieve the purposes of the Plan or to comply with applicable laws.
- Amendment of Award. The Committee may amend, modify or terminate any outstanding Award, including substituting therefor another Award of the same or a different type, changing the date of exercise or realization and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided that the Participant's consent to such action shall be required unless the Committee determines that the action, taking into account any related action, would not materially and adversely affect the Participant Notwithstanding the foregoing sentence, unless such action is approved by the Company's stockholders or is an adjustment resulting from the operation of Section 5 (b) of the Plan: (A) no outstanding Option granted under the Plan may be amended to provide an exercise price per share that is lower than the then-current exercise price per share stated in such outstanding Option, and (B) the Committee may not cancel any outstanding Option and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled Option.
- (j)

 Transferability. In the discretion of the Committee, any Award may be made transferable upon such terms and conditions and to such extent as the Committee determines (which terms and conditions may be waived by the Committee in its discretion), provided that Incentive Stock Options may be transferable only to the extent permitted by the Code. The Committee may in its discretion waive any restriction on transferability.

Section 13. Miscellaneous

- (a)

 No Right To Employment. No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment. The Company expressly reserves the right at any time to dismiss a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.
- (b)

 No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed under the Plan until he or she becomes the holder thereof. A Participant to whom Common Stock is awarded shall be considered the holder of the Stock at the time of the Award except as otherwise provided in the applicable Award.
- (c) *Effective Date.* Subject to the approval of the stockholders of the Company, the Plan shall be effective on the Effective Date. Before such approval, Awards may be made under the Plan expressly subject to such approval.
- (d)

 Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time, subject to any stockholder approval that the Board determines to be necessary or advisable.

(e) Governing Law. The provisions of the Plan shall be governed by and interpreted in accordance with the laws of Delaware.

This Plan was approved by the Board of Directors on October 17, 1994.

This Plan was approved by the stockholders on October 17, 1994.

The Board of Directors amended and restated this Plan on April 8, 1998.

The amendment and restatement was approved by the stockholders at the Annual Meeting of Stockholders on May 14, 1998.

The Board of Directors amended and restated this Plan on March 16, 2000.

The amendment and restatement was approved by the stockholders at the Annual Meeting of Stockholders on May 18, 2000.

The Board of Directors amended and restated this Plan on March 23, 2001.

The amendment and restatement was approved by the stockholders at the Annual Meeting of Stockholders on May 17, 2001.

The Board of Directors amended and restated this Plan on March 21, 2002.

The amendment and restatement was approved by the stockholders at the Annual Meeting of Stockholders on May 16, 2002.

The Board of Directors amended and restated this Plan on April 7, 2004.

The amendment and restatement was approved by the stockholders at the Annual Meeting of Stockholders on May 19, 2004.

The Board of Directors amended and restated this Plan on April 4, 2005.

The amendment and restatement was approved by the stockholders at the Annual Meeting of Stockholders on May 18, 2005.

The Board of Directors authorized the amendment and restatement of this Plan on May 11, 2005, effective September 13, 2005. Pursuant to Section 13 (d) of the Plan, the Board determined that it was not necessary or advisable to obtain stockholder approval of the amendment and restatement.

The Board of Directors amended and restated this Plan to increase the shares available for issuance on January 17, 2008. On April 10, 2008, the Compensation, Nominating & Governance Committee amended and restated the Plan for certain other amendments.

<u>These amendments and restatements were submitted for approval to the stockholders at the Annual Meeting of Stockholders on May 15, 2008.</u>

ARQULE, INC. 19 PRESIDENTIAL WAY WOBURN, MA 01801

VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 12:00 noon. Eastern Daylight Savings Time May 14, 2008. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE STOCKHOLDER COMMUNICATIONS

If you would like to reduce the costs incurred by ArQule, Inc. in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access stockholder communications electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 12:00 noon. Eastern Daylight Savings Time May 14, 2008. Have your proxy card in hand when you call and then follow the simple instructions.

VOTE BY MAIL

Mark, sign, and date your proxy card and return it in the postage-paid envelope we have provided or return it to ArQule, Inc., c/o ADP, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS ARQUL 1 KEEP THIS PORTION FOR YOUR RECORDS FOLLOWS: x

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

ARQULE, INC.

The Board recommends a vote FOR Proposals 1, 2, and 3.

Vote On Directors

		For All	Withhold All	For All Except
1.	To elect Ronald M. Lindsay, William G. Messenger, and Patrick J. Zenner as directors to hold office for a term of three years and until their respective successors are elected and qualified.	O	0	0
	To withhold authority to vote for any individual nominee(s), mark For All Except and write the nominee s name on the line below.			

Vote On Proposals

		For	Against	Abstain
2.	To approve amendments to our Amended and Restated 1994 Equity Incentive Plan to increase the number of shares of common stock available for to awards granted under the Plan by 2,400,000, from 9,600,000 to 12,000,000 shares of common stock and to incorporate other changes described in our proxy statement.	0	0	o
3.	To ratify the selection of PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit our financial statements for the fiscal year ending December 31, 2008.	o	o	o

This proxy, when properly executed, will be voted in the manner directed by the undersigned stockholders. If no such directions are given, this proxy will be voted FOR the election of the nominees listed above and FOR proposals 2 and 3. In their discretion, the proxies are also authorized to vote upon such other matters as may properly come before the meeting.

NOTE: Please sign exactly as name appears on stock certificate. When shares are held by joint tenants, both should sign. When signing as attorney, executor, administrator, trustee, or guardian, please give full title as such. If a corporation, please sign in full corporate name by President or other authorized officer. If a partnership, please sign in partnership name by authorized person.

Signature [PLEASE SIGN WITHIN BOX] Date Signature (Joint Owners) Date

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS $^{\circ}$

OF

ARQULE, INC.

ANNUAL MEETING OF STOCKHOLDERS

The undersigned stockholder of ArQule, Inc. hereby appoints Peter S. Lawrence and Robert J. Connaughton, Jr., and each of them acting individually as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of ArQule, Inc. that the undersigned is entitled to vote at the Annual Meeting of Stockholders to be held at 10:00 a.m. Eastern Daylight Savings Time on Thursday May 15, 2008, at the offices of ArQule, Inc. at 19 Presidential Way, Woburn, Massachusetts 01801-5140, and any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE UNDERSIGNED STOCKHOLDER. IF NO SUCH DIRECTIONS ARE GIVEN, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE NOMINEES LISTED ON THE REVERSE SIDE AND FOR PROPOSALS 2 AND 3.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE.

OuickLinks

ARQULE, INC. NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD MAY 15, 2008

ARQULE, INC.

PROPOSAL 1 ELECTION OF DIRECTORS

CORPORATE GOVERNANCE

BOARD COMMITTEES AND MEETINGS

DIRECTOR COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

COMPENSATION COMMITTEE REPORT

EXECUTIVE COMPENSATION

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POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE IN CONTROL

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

REPORT OF THE AUDIT COMMITTEE

PROPOSAL 2 AMENDMENTS TO OUR AMENDED AND RESTATED 1994 EQUITY INCENTIVE PLAN

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

PROPOSAL 3 RATIFICATION OF THE SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

SHARE OWNERSHIP OF MANAGEMENT

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

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Appendix A

ARQULE, INC. Amended and Restated 1994 Equity Incentive Plan