NORTHFIELD LABORATORIES INC /DE/ Form DEF 14A August 15, 2005

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

SCHEDULE 14A (RULE 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT SCHEDULE 14A INFORMATION

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

Filed by a Party other than the Registrant [] Check the appropriate box: [] Preliminary Proxy Statement [] CONFIDENTIAL, FOR USE OF THE COMMISSION ONLY (AS PERMITTED BY RULE 14a-6(e)(2)[X] Definitive Proxy Statement [] Definitive Additional Materials [] Soliciting Material Pursuant to Section 240.14a-12 Northfield Laboratories 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): [X] No fee required. [] Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11. 1) Title of each class of securities to which transaction applies: 2) Aggregate number of securities to which transaction applies:

3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the

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	4) Proposed maximum aggregate value of transaction:
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	1) Amount Previously Paid:
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NORTHFIELD LABORATORIES INC.

1560 Sherman Avenue, Suite 1000 Evanston, Illinois 60201-4800

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

to be held September 29, 2005

TO THE STOCKHOLDERS OF NORTHFIELD LABORATORIES INC:

The Annual Meeting of the stockholders of Northfield Laboratories Inc. (the "Company") will be held on Thursday, September 29, 2005 at 10:00 A.M., local time, at The Deer Path Inn, 255 East Illinois Road, Lake Forest, Illinois, 60045 for the following purposes:

- To elect seven directors to hold office until the next Annual Meeting of the stockholders of the Company;
- To ratify the appointment of KPMG LLP as independent auditors of the Company to serve for the Company's 2006 fiscal year;
- 3. To approve a proposal to amend the Company's Restated Certificate of Incorporation to increase the number of authorized shares of the Company's Common Stock, par value \$.01 per share, from 30,000,000 to 60,000,000 shares;
- 4. To approve an amendment to the Northfield Laboratories Inc. 2003 Equity Compensation Plan to increase the number of shares available for awards under the Plan from 750,000 to 2,250,000 shares; and
- 5. To transact such other business as may properly come before the $\mbox{\it Annual}$ Meeting.

The Board of Directors has fixed the close of business on August 11, 2005 as the record date for determination of stockholders entitled to notice of and to vote at the Annual Meeting or any adjournment or postponement thereof.

Stockholders are requested to complete and sign the enclosed Proxy, which is solicited by the Board of Directors, and promptly return it in the accompanying envelope.

By Order of the Board of Directors

JACK J. KOGUT Secretary

Evanston, Illinois

August 15, 2005

IT IS IMPORTANT THAT YOUR STOCK BE REPRESENTED AT THE ANNUAL MEETING REGARDLESS OF THE NUMBER OF SHARES YOU HOLD. PLEASE COMPLETE, SIGN AND MAIL THE ENCLOSED PROXY IN THE ACCOMPANYING ENVELOPE EVEN IF YOU INTEND TO BE PRESENT AT THE ANNUAL MEETING. RETURNING THE PROXY WILL NOT LIMIT YOUR RIGHT TO VOTE IN PERSON OR TO ATTEND THE ANNUAL MEETING, BUT WILL ENSURE YOUR REPRESENTATION IF YOU CANNOT ATTEND. THE PROXY IS REVOCABLE AT ANY TIME PRIOR TO ITS USE.

NORTHFIELD	LABORATORIES	INC.
PROXY	STATEMENT	

This document is being furnished to holders of the common stock of Northfield Laboratories Inc. in connection with the solicitation of proxies by our board of directors for use at Northfield's annual meeting of stockholders to be held on Thursday, September 29, 2005, commencing at 10:00 A.M., local time, at The Deer Path Inn, 255 East Illinois Road, Lake Forest, Illinois, 60045 and at any adjournment or postponement thereof, for the purpose of considering and acting upon the matters set forth in the accompanying Notice of Annual Meeting of Stockholders.

This document is first being mailed to holders of common stock on or about

August 15, 2005.

Our principal executive offices are located at 1560 Sherman Avenue, Suite 1000, Evanston, Illinois 60201-4800. Our telephone number is (847) 864-3500. We also maintain an Internet website at www.northfieldlabs.com. The information contained on our website is not deemed to be soliciting material and is not incorporated by reference in this document.

VOTING AND RECORD DATE

Only holders of record of common stock as of the close of business on August 11, 2005, the record date for the annual meeting, are entitled to notice of and to vote at the annual meeting. As of August 11, 2005, there were 26,751,397 shares of common stock outstanding and entitled to be voted at the annual meeting.

QUORUM

The presence, in person or by proxy, of the holders of a majority of the outstanding shares of common stock entitled to vote at the annual meeting is necessary to constitute a quorum at the annual meeting. Shares that are present and entitled to vote on any of the proposals to be considered at the annual meeting will be considered to be present at the annual meeting for purposes of establishing the presence or absence of a quorum for the transaction of business. A "broker non-vote" occurs if a broker indicates on the enclosed proxy that it does not have discretionary authority as to certain shares to vote on a particular proposal, but otherwise has authority to vote at the annual meeting. Abstentions and shares subject to broker non-votes will be considered as present for purposes of determining the presence or absence of a quorum at the annual meeting.

REOUIRED VOTE

Each holder of record of shares who is entitled to vote may cast one vote per share held on all matters properly submitted for the vote of our stockholders at the annual meeting.

Directors are elected by plurality vote and the seven nominees who receive the greatest number of votes will be elected. Withheld votes and abstentions will not be taken into account for purposes of determining the outcome of the election of directors.

The affirmative vote of a majority of the shares present in person or by proxy at the annual meeting and entitled to vote on such proposal will be required to ratify the appointment of our independent auditors. Abstentions will have the effect of negative votes with respect to this proposal.

The affirmative vote of a majority of the shares outstanding as of the record date will be required to approve the proposal to amend Northfield's Restated Certificate of Incorporation. Abstentions will have the effect of negative votes with respect to this proposal.

The affirmative vote of a majority of the shares present in person or by proxy at the annual meeting and entitled to vote on such proposal will be required to approve the proposal to amend the Northfield Laboratories Inc. 2003 Equity Compensation Plan. Broker non-votes will not be taken into account for purposes of determining the outcome of the voting on this proposal. Abstentions will have the effect of negative votes with respect to this proposal.

PROXIES

All shares entitled to vote and represented by properly executed proxies received and not revoked prior to the annual meeting will be voted at the annual meeting in accordance with the instructions indicated on those proxies. If no instructions are indicated on a properly executed proxy, the shares represented by that proxy will be voted as recommended by the board of directors.

If any other matters are properly presented at the annual meeting for consideration, including, among other things, consideration of a motion to adjourn the annual meeting to another time or place, the persons named in the enclosed form of proxy will have discretion to vote on those matters in accordance with their best judgment to the same extent as the person signing the proxy would be entitled to vote. It is not currently anticipated that any other matters will be raised at the annual meeting.

Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before it is voted. A proxy may be revoked by filing with Northfield's Corporate Secretary, at or before the taking of the vote at the annual meeting, a written notice of revocation or a duly executed proxy, in either case later dated than the prior proxy relating to the same shares. A proxy may also be revoked by attending the annual meeting and voting in person, although attendance at the annual meeting will not itself revoke a proxy. Any written notice of revocation or subsequent proxy should be sent so as to be delivered to Northfield Laboratories Inc., 1560 Sherman Avenue, Suite 1000, Evanston, Illinois 60201-4800, Attention: Corporate Secretary, or hand delivered to the Corporate Secretary, at or before the taking of the vote at the annual meeting.

We will bear all of the expenses of this solicitation. In addition to solicitation by mail, our directors, officers and employees may solicit proxies personally and by telephone, internet and telegraph, all without extra compensation.

ANNUAL REPORT

A copy of our Annual Report on Form 10-K for our 2005 fiscal year, including financial statements, has been sent simultaneously with this document or has been previously provided to all stockholders entitled to vote at the annual meeting.

RECOMMENDATIONS OF THE BOARD OF DIRECTORS

The board of directors recommends a vote FOR each of the proposals to be considered at the annual meeting.

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ITEM 1. ELECTION OF DIRECTORS

The number of directors comprising our full board of directors is currently fixed at seven. All of our directors stand for election each year at our annual meeting. Directors elected at this year's annual meeting will hold office until the next annual meeting or until their earlier resignation or removal.

Northfield's board of directors, based on the recommendation of its nominating and corporate governance committee, has nominated the following nominees for election at the annual meeting. In the event any of the nominees should become unavailable for election, the nominating and corporate governance committee may designate substitute nominees, in which event shares represented by all proxies returned will be voted for the substitute nominees unless an indication to the contrary is included on the proxies. The board of directors

recommends a vote FOR the election of each of the following director nominees.

NAME 	DIRECTOR SINCE	OFFICE	PRINCIPAL OCCUPATION AND BUSINESS EXPERIENCE
Steven A. Gould, M.D	1993	Chairman and Chief Executive Officer	Dr. Gould, age 58, is a founding member Northfield's scientific team and has so as the Chairman and Chief Executive Off of Northfield since July 2002. From July 1993 to July 2002, Dr. Gould served as President and a director of Northfield Prior to that time, Dr. Gould served as Consultant and Principal Investigator Northfield's clinical trials. From 198 1993, Dr. Gould served as Chief of the Department of Surgery of Michael Reese Hospital. Since 1990, Dr. Gould has also served as Professor of Surgery, nonsal at the University of Illinois College Medicine. From 1979 through 1989, Dr. was Assistant Professor and then Assoc Professor in the Department of Surgery The University of Chicago School of Medicine. Dr. Gould has been involved development of national transfusion pothrough his participation in the active of the National Heart Lung Blood Institute National Blood Resource Education of the Department of Defense, the Americal Association of Blood Banks, the Americal College of Surgeons and The American Reconst. Dr. Gould received his M.D. degratement in 1973.
John F. Bierbaum	2002	Director	Mr. Bierbaum, age 61, has served as a director of Northfield since September Currently, he is serving as Chief Fina Officer, Archdiocese of Saint Paul and Minneapolis. Mr. Bierbaum has since Ma 2003 served as the Executive Vice Pres of Pohlad Companies. Prior to that, Mr Bierbaum served as a senior officer of PepsiAmericas, Inc. and its predecesso Mr. Bierbaum is a C.P.A. and received B.S. degree from the University of Min in 1967.
		3	
NAME	DIRECTOR SINCE	OFFICE	PRINCIPAL OCCUPATION AND BUSINESS EXPERIENCE

director of Northfield since 1989. Mr.

Chelberg served from May 1992 through November 2000 as the Chairman and Chief

			Executive Officer of PepsiAmericas, Inc formerly known as Whitman Corporation. Chelberg is also a director of First Mi Bancorp, Inc. and Snap-On Incorporated. Chelberg received his LLB degree from t University Of Illinois College of Law i 1958.
Paul M. Ness, M.D	2002	Director	Dr. Ness, age 59, has served as a direct of Northfield since September 2002. Dr. is Professor of Pathology, Medicine and Oncology at the Johns Hopkins Universit School of Medicine and has been Directo the School's Transfusion Medicine Divis since 1979. Dr. Ness previously served Chief Executive Officer, Senior Medical Director and Scientific Director of the American Red Cross Blood Services Great Chesapeake and Potomac Region. Dr. Ness served on the Blood Products Advisory Committee of the Food and Drug Administration, or FDA, from 1996 to 19 and has also served on numerous FDA adv panels. He was the president of the Ame Association of Blood Banks in 1999 and became Editor of the journal TRANSFUSIC 2003. Dr. Ness received his M.D. degree the State University of New York in 197
Jack Olshansky	1989	Director	Mr. Olshansky, age 76, has served as a director of Northfield since 1989. Mr. Olshansky is an independent consultant companies in the healthcare industry. F 1983 to July 2000, Mr. Olshansky was a founding general partner of Montgomery Medical Ventures, L.P. Prior to that ti Mr. Olshansky served as President of Mc Laboratories, a division of American Hospital Supply Corporation, and as Vic President of the Medical Division of Cu Laboratories. Mr. Olshansky serves as Chairman of the Board of Directors of Emergent Respiratory Products Corporation and a director of Med-Design Corporation Mr. Olshansky received his B.A. degree
David A. Savner	1998	Director	Brooklyn College in 1950. Mr. Savner, age 61, has served as a dir of Northfield since April 1998. Mr. Sav has since April 1998 been the Senior Vi President and General Counsel of Genera Dynamics Corporation. From 1987 to 1998 Savner was a senior partner in the law of Jenner & Block. Mr. Savner received J.D. degree from Northwestern Universit

School in 1968.

NAME 	DIRECTOR SINCE	OFFICE	PRINCIPAL OCCUPATION AND BUSINESS EXPERIENCE
Edward C. Wood, Jr		Director Nominee	Edward C. Wood, Jr., age 60, has been nominated to serve as a director of Northfield. Currently, he is serving as Chief Executive Officer of Summit Roundtable, consultants to medical prod companies. Prior to 2000, Mr. Wood serv President of COBE BCT Inc., now Gambro Inc., a blood component therapy company Wood is also a director of MonoGen, Inc Engineering and Research Associates, In (SEBRA) and CytoLogic, Inc. Mr. Wood received his M.B.A. from the University Colorado in 1972.

COMMITTEES OF THE BOARD OF DIRECTORS

Our board of directors has three standing committees: the audit committee, nominating and corporate governance committee and compensation committee.

The following directors currently serve as members of these committees:

Audit Committee -- John F. Bierbaum (Chairman)

> Bruce Chelberg Jack Olshansky

-- David Savner (Chairman) Nominating and Corporate

Governance Committee Paul M. Ness

Compensation Committee --Jack Olshansky (Chairman)

Bruce S. Chelberg

DIRECTOR INDEPENDENCE

The board of directors has determined that each of the non-management directors and director nominees, Messrs. Bierbaum, Chelberg, Olshansky, Ness, Savner and Wood, is an independent director as defined in Rule 4200 of the Nasdaq listing standards and, therefore, that a majority of our board of directors is independent as so defined.

The foregoing independence determination also included the conclusion of the board of directors that each of the members of the audit committee is independent for purposes of membership on the audit committee under Rule 4350(d) of the Nasdaq listing standards, which includes the independence requirements of Rule 4200 and additional independence requirements under SEC Rule 10A-3(b), and that each of the members of the nominating and corporate governance committee and compensation committee is independent under the Nasdaq listing standards applicable for purposes of membership on those committees.

EXECUTIVE SESSIONS

Our independent directors participate in regularly scheduled executive sessions at which only independent directors are present. During our 2005 fiscal year, our independent directors participated in two executive sessions, all of which were held in conjunction with regularly scheduled board meetings.

AUDIT COMMITTEE

Meetings. During our 2005 fiscal year, the audit committee met six times. Each of the members of the audit committee participated in at least 75 percent of the meetings of the committee.

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Charter and Purposes. The charter of the audit committee is available on our Internet website as described below under "Corporate Governance and Website Information." The primary purposes of the audit committee are to oversee on behalf of the board of directors:

- our accounting and financial reporting processes and the integrity of our financial statements;
- the audits of our financial statements and the appointment, compensation, qualifications, independence and performance of our independent auditors; and
- our internal control over financial reporting.

Members. The board of directors has determined that the members of the audit committee are independent as described above under "Director Independence." The board of directors has also determined that all of the members of the audit committee meet the requirement of the Nasdaq listing standards that each member be able to read and understand fundamental financial statements, including a company's balance sheet, income statement and cash flow statement. Additionally, the board of directors has determined that Mr. Bierbaum meets the requirement of the Nasdaq listing standards that at least one member of the committee has past employment experience in finance or accounting, requisite professional certification in accounting, or other comparable experience or background which results in the individual's financial sophistication.

Audit Committee Financial Expert. The board of directors has not determined that any of the members of the audit committee is an "audit committee financial expert" as defined in SEC Regulation S-K Item 401(h). Our board of directors believes that the current members of its audit committee have requisite levels of financial literacy and financial sophistication to enable the audit committee to be effective in relation to the purposes outlined in its charter and in light of the scope and nature of our company's business and financial statements. The board of directors accordingly does not believe it is necessary at this time to recruit a new board member in order to name an audit committee financial expert.

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE AND DIRECTOR NOMINATION PROCESS

Meetings. During our 2005 fiscal year, the nominating and corporate governance committee met once. Each of the members of the nominating and corporate governance committee attended this meeting.

Charter and Purposes. The charter of the nominating and corporate governance committee is available on our Internet website as described below under "Corporate Governance and Website Information." The primary purposes of the committee are to:

- select the individuals qualified to serve on the board of directors for election by our stockholders at each annual meeting of stockholders and to fill vacancies on the board of directors; and
- develop, assess and recommend to the board of directors corporate

governance policies for our company.

Members. The board of directors has determined that the members of the nominating and corporate governance committee are independent as described above under "Director Independence."

Process for Identifying Director Candidates. The committee's current process for identifying and evaluating nominees for director consists of general periodic evaluations of the size and composition of the board of directors with a goal of maintaining continuity of appropriate industry expertise and knowledge of our company.

Director Nominations Made by Stockholders. The nominating and corporation governance committee will consider nominations timely made by stockholders pursuant to the requirements of our bylaws referred to below under "Procedure for Submitting Stockholder Proposals and Nominations." The committee has not formally adopted any specific elements of this policy, such as minimum specific qualifications or specific qualities or skills that must be possessed by qualified nominees, beyond the committee's willingness to consider candidates proposed by stockholders. The committee expects to monitor developments in this area in the future and may or may not consider adopting a more detailed policy.

COMPENSATION COMMITTEE

Meetings. During our 2005 fiscal year, the compensation committee met two times. Each of the members of the compensation committee attended all of these meetings.

Charter and Purposes. The charter of the compensation committee is available on our Internet website as described below under "Corporate Governance and Website Information." The primary purposes of the committee are to:

- review and approve the compensation of our Chief Executive Officer and other executive officers;
- review the performance of our Chief Executive Officer and other executive officers; and
- make recommendations to the board of directors with respect to compensation, incentive compensation plans and equity-based plans applicable to our executive officers and employees.

STOCKHOLDER COMMUNICATIONS TO THE BOARD OF DIRECTORS

The audit committee has undertaken on behalf of the board of directors to be the recipient of communications from stockholders relating to our company. If particular communications are directed to the full board, independent directors as a group, or individual directors, the audit committee will route these communications to the appropriate directors or committees so long as the intended recipients are clearly stated. You may send communications intended to be anonymous by mail, without indicating your name or address, to Northfield Laboratories Inc., 1560 Sherman Avenue, Suite 1000, Evanston, Illinois 60201-4800, Attention: Chairman of the Audit Committee. Communications not intended to be made anonymously may be made by mail to the above address, including whatever identifying or other information you wish to communicate.

Communications from employees or agents of our company will not be treated as communications from our stockholders unless the employee or agent clearly indicates that the communication is made solely in the person's capacity as a stockholder. Stockholder proposals and director nominations intended to be presented at a meeting of stockholders by inclusion in our company's proxy statement under SEC Rule 14a-8 or intended to be brought before a stockholders meeting in compliance with our bylaws are subject to specific notice and other requirements referred to under "Procedure for Submitting Stockholder Proposals and Nominations." The communications process for stockholders described above does not modify or relieve any requirements for stockholder proposals or nominations intended to be presented at a meeting of stockholders. If you wish to make a stockholder proposal or nomination to be presented at a meeting of stockholders, you may not communicate such proposals anonymously and may not use the audit committee communication process described above in lieu of following the notice and other requirements that apply to stockholder proposals or nominations intended to be presented at a meeting of stockholders.

CORPORATE GOVERNANCE GUIDELINES

The board of directors has adopted a set of corporate governance guidelines which, along with the charters of the board's committees, establish the framework for Northfield's corporate governance. These guidelines address a range of governance issues, including the responsibilities, composition, operations and structure of the board of directors and its committees, director and executive compensation, and Northfield's code of business conduct and ethics. The board of directors reviews these guidelines and other aspects of Northfield's governance practices periodically and may make changes in these guidelines in the future. Our corporate governance guidelines are available on our Internet website as described below under "Corporate Governance and Website Information."

Our corporate governance guidelines provide that it is Northfield's general policy not to nominate individuals who have reached the age of 72 for election to our board of directors. Individuals over the age of 72 years may stand for election as directors with the approval of the nominating and corporate governance

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committee and a two-thirds vote of the directors then in office and for circumstances of significant benefit to Northfield. Based on the recommendation of the nominating and corporate governance committee, the board of directors has unanimously approved the nomination of Jack Olshansky for election at the annual meeting. The board of directors based its determination to nominate Mr. Olshansky on his extensive experience in the healthcare industry and his valuable continuing contributions as a Northfield director. Mr. Olshansky has advised the company that this would be his final term as a Northfield director.

CORPORATE GOVERNANCE AND WEBSITE INFORMATION

We believe that we are in presently in compliance with the corporate governance requirements of the Nasdaq listing standards and will continue to be in compliance with these requirements as of the date of the annual meeting, assuming the nominees for director are elected and the absence of circumstances beyond our control that would adversely affect compliance. The principal elements of these governance requirements as implemented by our company are:

- an affirmative determination by the board of directors that a majority of the directors is independent;
- regularly scheduled executive sessions of independent directors;

- an audit committee, nominating and corporate governance committee and compensation committee comprised of independent directors and having the purposes and charters described above under the separate committee headings;
- specific audit committee authority and procedures outlined in the charter of the audit committee; and
- a code of business conduct and ethics applicable to directors, officers and employees of our company that meets the definition of a code of ethics set forth in SEC Regulation S-K Item 406. This code also contains provisions that constitutes a code of ethics specifically applicable to our Chief Executive Officer, Chief Financial Officer and other members of the our finance department based on their special role in promoting fair and timely public reporting of financial and business information about our company.

The charters of our three independent board committees, our audit committee's pre-approval policy for services provided by our auditors, our corporate governance guidelines and our code of business conduct and ethics are available without charge on our Internet website at www.northfieldlabs.com.

COMPENSATION OF DIRECTORS

We compensate our outside directors for their participation at board of director meetings and at committee meetings of the board of directors at a rate of \$1,000 per meeting. Directors are also reimbursed for their expenses for attending meetings of the board of directors and committees. In addition, non-employee directors receive an annual grant of 10,000 stock options, the share equivalent of \$15,000 in stock and an annual cash retainer of \$10,000 per year. The stock options provide for an exercise price equal to the market price of our common stock on the date of grant and are immediately exercisable. The stock grants are immediately vested on date of grant.

Dr. Ness has provided consulting services to Northfield relating to FDA regulatory matters and the sourcing of red blood cells from major blood banking organizations. Dr. Ness received \$60,000 from Northfield as payment for his consulting services during our 2005 fiscal year.

DIRECTOR ATTENDANCE

During our 2005 fiscal year, our board of directors held five meetings. Each of our directors attended 75 percent or more of these meetings.

We encourage our directors to attend our annual meeting of stockholders, but we have not adopted a formal policy requiring attendance. At our 2004 annual meeting three of our six directors were in attendance.

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MANAGEMENT

EXECUTIVE OFFICERS

The board of directors will elect our executive officers at its first meeting following the annual meeting. Our executive officers are as follows:

NAME POSITION

Steven A. Gould, M.D	Chairman of the Board of Directors and Chief Executiv
	Officer
Jack J. Kogut	Senior Vice President and Chief Financial Officer,
	Secretary and Treasurer
Marc D. Doubleday	Vice President and General Manager
Eva C. Essig, Ph.D	Vice President Regulatory Affairs and Quality
George A. Hides	Vice President Clinical Operations
Robert L. McGinnis	Vice President Planning and Resource Development
Laurel A. Omert, M.D	Chief Medical Officer
Sophia H. Twaddell	Vice President Corporate Communications

A biographical summary of the business experience of $\mbox{Dr.}$ Gould is included under "Election of Directors."

Mr. Kogut, age 58, has served as Senior Vice President and Chief Financial Officer since January 2003. From 1986 to December 2002, Mr. Kogut served as Vice President Finance. Mr. Kogut has also served as Northfield's Secretary and Treasurer since January 1994. From 1982 to 1986, he was the Group Controller -- Health Products for Sybron Corporation and also served as President of Sybron Asia. Mr. Kogut received his M.B.A. degree from Loyola University of Chicago in 1972.

Mr. Doubleday, age 46, has served as Vice President and General Manager since February 2003. From December 1994 through February 2003, Mr. Doubleday served as Northfield's Vice President Process Engineering. Prior to December 1994, he served as Northfield's Plant Manager and Senior Process Engineer. Before joining Northfield in 1988, Mr. Doubleday was employed in various capacities with Davy McKee, Millipore Corporation and Abbott Laboratories, Inc. Mr. Doubleday received his M.M. degree from Northwestern University in 1991.

Dr. Essig, age 40, has served as Vice President Regulatory Affairs and Quality since September 2003. From 1993 to 2003, Dr. Essig served in various capacities at Searle-Pharmacia, now Pfizer Inc., with her most recent position being Director Worldwide Regulatory Affairs with global responsibility for Celebrex. Her career in Regulatory Affairs began at Hoechst Canada Inc., now Sanofi-Aventis in 1990. Dr. Essig received her Ph.D. degree in Neuropharmacology from Bristol University, Bristol, U.K. in 1990.

Mr. Hides, age 38, has served as Vice President Clinical Operations since January 2005. Prior to January 2005, Mr. Hides served as Senior Director of Clinical and Regulatory Affairs, as well as various roles on Northfield's clinical development team. Before joining Northfield in 1995, Mr. Hides was employed in various clinical and research capacities at Columbia/HCA -- Michael Reese Hospital. Mr. Hides received his BA degree from De Pauw University in 1989.

Mr. McGinnis, age 41, has served as Vice President Planning and Resource Development since February 2003. Prior to that time, Mr. McGinnis served as Vice President Manufacturing Development since August 1997. From 1995 to 1997, Mr. McGinnis was a Project Manager for Raytheon Engineering and Construction. Prior to 1995, Mr. McGinnis was employed by the John Brown division of Trafalgar House as a Project Manager and Engineer. Mr. McGinnis received his MBA degree from the University of Chicago in 1995.

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January 2005. From 1997 to January 2005, Dr. Omert served as an Associate Professor of Surgery at Drexel University and as Associate Director of Trauma at Allegheny General Hospital. Prior to 1997, Dr. Omert served as Associate Professor of Surgery in the Division of Trauma at West Virginia University. Dr. Omert received her M.D. degree from the Loyola University/Stritch School of Medicine in 1982.

Ms. Twaddell, age 53, has served as Vice President Corporate Communications since January 2003. From 1999 to 2002, Ms. Twaddell was Senior Vice President and Partner and Global Biotechnology Practice Leader at Fleishman-Hillard. Prior to joining Fleishman-Hillard, Ms. Twaddell was Vice President Investment Banking at Prudential Vector Healthcare Group and held various positions at American Hospital Supply Corporation, Baxter Healthcare Corporation and Boots Pharmaceuticals, Inc. She received an M.A. degree from Northwestern University in 1978.

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EXECUTIVE COMPENSATION

ended May 31, 2005.

The following table summarizes all compensation paid for our last three completed fiscal years to our Chief Executive Officer and our four other most highly compensated executive officers.

SUMMARY COMPENSATION TABLE

					LONG-TERM COMPEN AWARDS
	ANNUA	L COMPENSA	ATION		
NAME AND PRINCIPAL POSITION	YEAR(1)	SALARY	BONUS	OTHER ANNUAL COMPENSATION(2)	RESTRICTED STOCK AWARDS(\$)
Steven A. Gould, M.D	2005	341,216	100,000	42 , 809	
Chairman and Chief	2004	318,938		36,541	112,500
Executive Officer	2003	308,465		32,239	
Jack J. Kogut	2005	269 , 921	50,000	34,528	
Senior Vice President and	2004	253,125		27,940	56,250
Chief Financial Officer	2003	244,124		27,453	
Eva C. Essig, Ph. D	2005	196,385	15,000	11,929	25,800
Vice President Regulatory	2004	141,539	10,000	1,097	
Affairs and Quality	2003(3)				
Marc D. Doubleday	2005	190,796		12,751	12,900
Vice President and	2004	178 , 869		11,528	11,250
General Manager	2003	171,784		10,454	
Sophia H. Twaddell	2005	163,573	25,000	9,916	
Vice President Corporate	2004	150,196		8,473	11,250
Communications	2003	61,154		1,586	

⁽¹⁾ Our fiscal year begins on June 1 and ends on May 31. Our 2005 fiscal year

⁽²⁾ The indicated amounts represent life insurance premiums paid by Northfield, contributions made by Northfield to the indicated executive officer's 401(k) plan account and reimbursement of tax consulting expenses.

(3) Dr. Essig became an executive officer of Northfield in September 2003.

The following table sets forth all options granted to our Chief Executive Officer and other named executive officers during our last completed fiscal year.

OPTION GRANTS IN LAST FISCAL YEAR

					POTENTIAL	REALI
		PERCENT OF			VALUE AT	: ASSU
	NUMBER OF	TOTAL			ANNUAL RAT	ES OF
	SECURITIES	OPTIONS			PRICE APPRE	CIATI
	UNDERLYING	GRANTED TO	EXERCISE		OPTION	TERM (
	OPTIONS	EMPLOYEES IN	PRICE	EXPIRATION		·
NAME	GRANTED	FISCAL YEAR	(\$/SH)	DATE	5%	- 1
Steven A. Gould, M.D	100,000	27%	18.55	1/28/2015	1,166,600	2,9
Jack J. Kogut	50,000	14%	18.55	1/28/2015	583,300	1,4
Eva C. Essig, Ph.D	25,000	7%	12.90	9/1/2014	202,819	5
Marc D. Doubleday	25,000	7%	12.90	9/1/2014	202,819	5
Sophia H. Twaddell	25,000	7%	18.55	1/28/2015	291,650	7

(1) The potential realizable value amounts shown illustrate the values that might be realized upon exercise immediately prior to the expiration of their term using five percent and ten percent appreciation rates as required to be used in this table by the Securities and Exchange Commission, compounded annually, and are not intended to forecast possible future appreciation, if any, of our stock price. Additionally, these

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values do not take into consideration the provisions of the options providing for nontransferability or termination of the options following termination of employment.

The following table sets forth information regarding number of stock options exercised by our Chief Executive Officer and other named executive officers during our 2005 fiscal year and the aggregate value as of May 31, 2005 of unexercised stock options held by these individuals.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR
AND FISCAL YEAR-END OPTION VALUES

			NUMBER OF SECURITIES	
			UNDERLYING	VALUE C
			UNEXERCISED OPTIONS	IN-THE-
	SHARES		AT FISCAL YEAR-END	AT FISC
	ACQUIRED	VALUE		
NAME	EXERCISE(#)	REALIZED(\$)	EXERCISABLE/UNEXERCISABLE	EXERCISAE
Steven A. Gould, M.D			180,000/225,000	812,

Jack J. Kogut			124,500/112,500
Eva C. Essig, Ph.D			6,250/43,750
Marc D. Doubleday	6,000	40,980	70,750/56,250
Sophia H. Twaddell			11,250/48,750

(1) These figures are based on a fair market value for our common stock at May 31, 2005 of \$13.06 per share, the closing price of the common stock as reported by the Nasdaq National Market as of that date. May 31, 2005 represents the last trading day in our 2005 fiscal year.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The compensation committee of the board of directors consists of Messrs. Chelberg and Olshansky. Neither of the members of the compensation committee is a current or former Northfield officer or employee or was a party to any disclosable related party transaction involving Northfield during our 2005 fiscal year.

EMPLOYMENT AGREEMENTS

We have employment agreements with Steven A. Gould, M.D., our Chief Executive Officer, and Jack J. Kogut, our Senior Vice President and Chief Financial Officer, Secretary and Treasurer. In accordance with the terms of these employment agreements, during our 2005 fiscal year Dr. Gould and Mr. Kogut, respectively, received:

- base salaries of \$341,216 and \$269,921;
- cash bonuses of \$100,000 and \$50,000; and
- stock options for 100,000 and 50,000 shares under the terms of the Northfield Laboratories Inc. 2003 Equity Compensation Plan.

Dr. Gould and Mr. Kogut were also permitted to participate in all other employee benefit plans and programs we make available generally to our employees.

In accordance with the terms of their employment agreements, Dr. Gould and Mr. Kogut may become entitled to annual cash bonuses, payable beginning in our 2006 fiscal year, contingent on achieving certain agreed upon performance goals. For the 2006 fiscal year, the target bonus payments for Dr. Gould and Mr. Kogut are 50 percent and 40 percent, respectively, of their annual base salary. For superior performance, the maximum bonus opportunity is 150 percent and 100 percent, respectively, of each executive's annual base salary. The employment agreements also provide for cash bonus payments equal to 150 percent and 100 percent, respectively, of each executive's annual base salary, as then in effect, upon the approval by Food and Drug Administration of the commercial sale of PolyHeme(R) in the United States.

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The employment agreements provide for certain payments following a termination of employment by the executive officer due to death, disability or for cause. Additionally, if we terminate the executive officer's employment other than by reason of death, disability or for cause, or if the executive officer terminates his employment for good reason, then we generally will be obligated to make a lump sum payment within five business days after notice of termination of an amount equal to two times the executive officer's highest

430, 34, 180, 81,

annual base salary in effect at any time during the preceding twelve months, plus any bonus that would have been payable through the employment term. In addition, for two years after the notice of termination, the executive officer will remain eligible to participate in our insurance and similar plans.

If following a change in control of our company, we terminate the executive officer's employment other than by reason of death, disability or for cause or if the executive officer terminates his employment for good reason, any unvested stock options held by the executive officer will be fully vested and exercisable as of the date of termination.

INDEMNIFICATION AGREEMENTS

We have written indemnification agreements with each of our directors and senior executive officers. These agreements require us to indemnify our directors and senior executive officers to the maximum extent permitted by law and to advance all expenses they may reasonably incur in connection with the defense of any claim or proceeding in which they may be involved as a party or witness. The agreements specify certain procedures and assumptions applicable in connection with requests for indemnification and advancement of expenses and also require us to continue to maintain directors and officers and fiduciary liability insurance for a six-year period following any change in control transaction. The rights provided to our directors and senior executive officers under their indemnification agreements are in addition to any other rights such individuals may have under our restated certificate of incorporation or bylaws, applicable law or otherwise.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

We currently have four equity compensation plans under which shares of our common stock are authorized for issuance. The following table sets forth certain information regarding our existing equity compensation plans as of May 31, 2005, the end of our last completed fiscal year.

EQUITY COMPENSATION PLAN INFORMATION

	NUMBER OF SHARES TO BE ISSUED UPON EXERCISE OF	WEIGHTED-AVERAGE EXERCISE PRICE OF OUTSTANDING	NUMBER C REMAINING A FUTURE ISS
PLAN CATEGORY	OUTSTANDING STOCK OPTIONS	STOCK OPTIONS	EQUITY COMPE
Equity compensation plans approved by stockholders Equity compensation plans	616,500	12.29	84
not approved by stockholders	761,125	9.26	272
Total	1,377,625	10.61	

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(1) The grant of additional options is prohibited under our stock option plans other than the Northfield Laboratories Inc. 2003 Equity Compensation Plan and the New Employee Stock Option Plan.

Our existing equity compensation plans provide for the grant of stock

options and, in the case of the Northfield Laboratories 2003 Equity Compensation Plan, restricted stock, stock appreciation rights and other forms of equity compensation. Individual grants to directors, officers and employees under our plans have generally been made pursuant to individual grant agreements that contain additional terms and conditions, such as vesting requirements and restrictions on exercise of the granted options after termination of employment. The compensation committee of our board of directors acts as the administrator of each of our equity compensation plans.

The Northfield Laboratories Inc. 1996 Stock Option Plan provides for the granting of stock options to purchase up to 500,000 shares of common stock to directors, officers, key employees and consultants. As of

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May 31, 2005, options to purchase a total of 308,000 shares of common stock at prices between \$9.56 and \$15.41 were outstanding under the 1996 plan. These options expire between 2006 and 2010, ten years after the date of grant.

The Northfield Laboratories Inc. 1999 Stock Option Plan was established effective June 1, 1999. The 1999 plan provides for the granting of stock options to purchase up to 500,000 shares of common stock to directors, officers, key employees and consultants. As of May 31, 2005, options to purchase a total of 328,125 shares of common stock at prices between \$3.62 and \$14.17 were outstanding under the 1999 plan. These options expire between 2011 and 2013, ten years after the date of grant.

The Northfield Laboratories Inc. New Employee Stock Option Plan was established effective January 1, 2003. The new employee plan provides for the granting of stock options to purchase up to 350,000 shares of common stock to newly-hired employees. As of May 31, 2005, options to purchase a total of 65,000 shares common stock at prices between \$3.62 and \$22.02 per share were outstanding under the new employee plan. These options expire between 2013 and 2015, ten years after the date of grant.

Our Nonqualified Stock Option Plan for Outside Directors provides for the granting of stock options to purchase up to 200,000 shares of common stock to directors who are neither employees of nor consultants to Northfield and who were not directors on June 1, 1994. As of May 31, 2005, options to purchase a total of 60,000 shares of common stock at prices between \$4.09 and \$13.38 per share were outstanding under this plan. These options expire between 2008 and

The Northfield Laboratories Inc. 2003 Equity Compensation Plan provides for the granting of stock options, restricted stock, stock appreciation rights and other forms of equity compensation to our non-employee directors, employees and consultants. As of May 31, 2005, restricted stock awards covering a total of 18,250 shares of common stock were outstanding under this plan. As of May 31, 2005, options to purchase a total of 616,500 shares of common stock at prices between \$5.94 and \$18.55 per share were outstanding under this plan. These options expire between 2013 and 2015.

EMPLOYEE BENEFIT PLANS

We sponsor a defined contribution 401(k) savings plan covering each of our employees satisfying certain minimum length of service requirements. We make discretionary contributions to this plan subject to certain maximum contribution limitations. Our expenses incurred under this plan for the years ended May 31, 2005, 2004 and 2003 were \$202,838, \$169,758 and \$145,307, respectively.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires that our directors, executive officers and persons who beneficially own more than 10% of our common stock file with the Securities and Exchange Commission initial reports of beneficial ownership of the common stock and reports of changes in their beneficial ownership.

To our knowledge, based solely upon a review of copies of reports furnished to us and written representations that no other reports were required during the fiscal year ended May 31, 2005, our officers, directors and greater than 10% beneficial owners complied during our last fiscal year with all applicable Section 16(a) filing requirements.

COMPENSATION COMMITTEE REPORT ON EXECUTIVE COMPENSATION

This report of the compensation committee of the board of directors discusses our executive compensation policies and the bases for the compensation paid to our Chief Executive Officer during our last completed fiscal year.

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COMPENSATION POLICY

Our policy with respect to executive compensation has been designed to compensate executive officers fairly and adequately in relation to their responsibilities, capabilities and contributions to Northfield. We have also sought to align the interests of senior management with those of our stockholders with respect to long-term increases in the price of our stock. The compensation committee considers it essential to our success that the compensation paid to executive officers remain competitive with similar or competitive companies in order to attract and retain the talented senior management necessary to achieve our business objectives.

COMPONENTS OF COMPENSATION

The components of compensation paid for our last completed fiscal year to our executive officers consisted of base salary, stock option and restricted stock grants, cash bonuses and certain other benefits. During our last completed fiscal year, we had employment agreements which provided for specified annual salaries with Steven A. Gould, M.D., our Chief Executive Officer, and Jack J. Kogut, our Senior Vice President and Chief Financial Officer, Secretary and Treasurer. See "Management -- Employment Agreements." The annual salaries provided in these employment agreements were determined based principally on the compensation levels for similar or competitive companies, including companies in the pharmaceutical and biomedical industries, as well as the levels of responsibility and experience of the individual executive.

During our last completed fiscal year, we granted 225,000 stock options and made restricted stock grants covering 3,000 shares of common stock to our named executive officers. These grants were made in recognition of these officers' significant contributions to the clinical development of PolyHeme. We also paid cash bonuses to four of our named executive officers during our last completed fiscal year totaling \$190,000. The other benefits provided to our executive officers consist of enhanced life and disability insurance coverage. Executive officers are also eligible for coverage under our general medical and life insurance programs and may participate in our defined contribution 401(k) savings plan on the same terms as other employees.

CHIEF EXECUTIVE OFFICER COMPENSATION

During our 2005 fiscal year, our Chief Executive Officer, Steven A. Gould,

M.D., received \$341,216 in base salary, a \$100,000 cash bonus and a grant of 100,000 stock options. The amount and composition of Dr. Gould's compensation during our 2005 fiscal year were determined based principally on compensation levels applicable to the chief executive officers of similar or competitive companies and secondarily on Dr. Gould's prior contributions to Northfield and his high level of experience and involvement with the development and clinical testing of PolyHeme.

Members of the Compensation Committee

Jack Olshansky Bruce S. Chelberg

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AUDIT COMMITTEE REPORT

Our audit committee has (i) reviewed and discussed our audited financial statements with management, (ii) discussed with our independent auditors the matters required to be discussed by SAS 61 (Codification of Statements of Auditing Standards, AU Section 380), as amended, (iii) received the written disclosures and the letter from our independent accountants required by Independence Standards Board Standard No. 1 (Independence Standards Board No. 1, Independence Discussions with Audit Committees), as amended, and (iv) discussed with our independent accountants the accountants' independence. Based on the review and discussions referred to above, the audit committee has recommended to our board of directors that our audited financial statements be included in its Annual Report on Form 10-K for the fiscal year ended May 31, 2005 for filing with the Securities and Exchange Commission.

Members of the Audit Committee

John F. Bierbaum Bruce S. Chelberg Jack Olshansky

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STOCK PERFORMANCE GRAPH

The following graph compares the cumulative total return on our common stock from May 31, 2000 through May 31, 2005 with the CRSP Total Return Index for the Nasdaq Stock Market (U.S. Companies) and the Nasdaq Pharmaceutical Index. The total stockholder return assumes that \$100 was invested in our common stock and each of the two indexes on May 31, 2000 and also assumes the reinvestment of any dividends. The return on our common stock is calculated using the closing price for the common stock on May 31, 2005, as quoted on the Nasdaq Stock Market, Inc. Past financial performance may not be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods. (Stock Performance Graph)

NASDAQ PHARMACEUTICALS
STOCKS SIC 2830-2839 US NORTHFIELD LABORATORI
& FOREIGN INC.

4 10/13/00 11ve.

May 31, 2000 100.00

May 31, 2001	106.40	149.30
May 31, 2002	78.00	37.00
May 30, 2003	86.80	57.90
May 28, 2004	98.30	118.20
May 31, 2005	93.70	117.40

The Report of the Compensation Committee on Executive Compensation, the Audit Committee Report and the Stock Performance Graph are not deemed to be soliciting material or to be filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, or Securities Exchange Act of 1934, as amended, or incorporated by reference in any document so filed.

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SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS AND MANAGEMENT

The following table sets forth information known to us with respect to the beneficial ownership of our common stock as of July 31, 2005, for (i) each of our current executive officers named under "Management -- Executive Officers," (ii) each of our current directors and director nominees, (iii) each other person who is known by us to be the beneficial owner of more than five percent of our outstanding common stock and (iv) all of our current directors, director nominees and executive officers as a group. Except as otherwise indicated, the address of each person named in the following table is c/o Northfield Laboratories Inc., 1560 Sherman Avenue, Suite 1000, Evanston, Illinois 60201-4800.

NAME OF STOCKHOLDER	NUMBER OF SHARES	PERCENTAGE BENEFICIALLY OWNED(1)	
Steven A. Gould, M.D	723,450(2)	2.7%	
Jack J. Kogut	211,810(3)	*	
Marc D. Doubleday	84,500(4)	*	
Eva C. Essig, Ph.D	20,750(5)	*	
George A. Hides	13,375(6)	*	
Robert L. McGinnis	71,000(7)	*	
Laurel Omert, M.D	(8)	*	
Sophia H. Twaddell	14,000(9)	*	
John F. Bierbaum	28,652(10)	*	
Bruce S. Chelberg	28,652(11)	*	
Paul M. Ness, M.D	28,652(12)	*	
Jack Olshansky	59,952(13)	*	
David A. Savner	45,652(14)	*	
Edward C. Wood, Jr		*	
PepsiAmericas, Inc	1,502,345(15)	5.6%	
Minneapolis, Minnesota 55402			
All current directors and executive officers as a group (14			
persons)	1,330,445	4.9%	

^{*} Less than one percent

- (1) Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of common stock subject to stock options and warrants currently exercisable or exercisable within 60 days are deemed outstanding for computing the percentage ownership of the person holding the options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage ownership of any other person. Except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.
- (2) Includes 180,000 shares of common stock which Dr. Gould is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Also includes 492,130 shares held in a personal trust and 43,820 shares held in a family trust. Does not include 225,000 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (3) Includes 124,500 shares of common stock which Mr. Kogut is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Also includes 64,805 shares held in a personal trust. Does not include 112,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.

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- (4) Includes 79,500 shares of common stock which Mr. Doubleday is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include 47,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (5) Includes 18,750 shares of common stock which Dr. Essig is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include 31,250 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (6) Includes 12,375 shares of common stock which Mr. Hides is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include 33,125 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (7) Includes 69,500 shares of common stock which Mr. McGinnis is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include 47,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (8) Does not include 25,000 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (9) Includes 11,250 shares of common stock which Ms. Twaddell is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include 48,750 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (10) Includes 25,000 shares of common stock which Mr. Bierbaum is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include any shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.

- (11) Includes 25,000 shares of common stock which Mr. Chelberg is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include any shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (12) Includes 25,000 shares of common stock which Dr. Ness is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include any shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (13) Includes 50,000 shares of common stock which Mr. Olshansky is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include any shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (14) Includes 40,000 shares of common stock which Mr. Savner is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days.
- (15) Based on the information reported in the Schedule 13G filed with the Securities and Exchange Commission by PepsiAmericas, Inc.

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ITEM 2. RATIFICATION OF APPOINTMENT OF INDEPENDENT PUBLIC ACCOUNTANTS

The audit committee of our board of directors has selected KPMG LLP as Northfield's independent auditors for the fiscal year ending May 31, 2006 and has further directed that the selection of independent auditors be submitted for approval by our stockholders at the annual meeting. KPMG has served as Northfield's independent auditors since 1985. The audit committee believes that KPMG is knowledgeable about our operations and accounting practices and is qualified to act in the capacity of our principal independent auditors.

During our fiscal 2004 and 2005 fiscal years, the following fees were billed to us by $\ensuremath{\mathsf{KPMG}}\xspace$:

	2004	2005
Audit Fees	\$ 79 , 000	\$116 , 950
Audit Related Fees	106,100	73 , 650
Tax Fees	17,525	17,869
All Other Fees		

Audit fees consist of fees billed for professional services rendered for the audit of Northfield's financial statements and review of the interim financial statements included in quarterly filings and services that are normally provided by KPMG in connection with statutory and regulatory filings or engagements, except those not required by statute or regulation.

Audit-related fees consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of Northfield's financial statements and are not reported under "Audit Fees." These services include accounting consultations and attest services related to financial reporting that are not required by statute or regulation and consultations concerning financial accounting and reporting standards.

Tax fees consist of fees billed for professional services related to federal and state tax compliance, tax advice and assistance with tax audits and appeals.

The audit committee considered whether the non-audit services rendered by KPMG were compatible with maintaining KPMG's independence as auditors of our financial statements, and concluded that they were. The audit committee has adopted a written pre-approval policy with respect to the services provided to us by our auditors. A copy of this policy is available our Internet website as described above under "Corporate Governance and Website Information." All of the services provided to us by our auditors during our 2004 and 2005 fiscal years were approved by our audit committee.

We expect a representative of KPMG to attend the annual meeting. The representative will have an opportunity to make a statement if he or she desires and also will be available to respond to appropriate questions. If the selection of KPMG is not approved by the stockholders, our board of directors will consider such a vote as advice to select other independent auditors for the 2007 fiscal year, rather than the 2007 fiscal year, because of the difficulty and expense involved in changing independent auditors on short notice.

The board of directors recommends a vote FOR ratification of the appointment of KPMG as independent auditors for fiscal 2006.

ITEM 3. APPROVAL OF AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION

SUMMARY OF THE AMENDMENT

The board of directors has determined that our Restated Certificate of Incorporation should be amended to increase the number of authorized shares of our common stock from 30,000,000 to 60,000,000 shares. Specifically, upon approval of this proposed amendment by our stockholders, Article 5 of our Restated Certificate of Incorporation would be amended and restated as set forth in Annex A, which is located at the end of this document. The other terms and provisions of our Restated Certificate of Incorporation would remain unchanged.

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As of August 11, 2005, the record date for the annual meeting, 26,751,397 shares of our common stock were outstanding and 1,408,625 shares were reserved for issuance under our stock option plans, leaving only 1,627,586 shares available for issuance for other purposes. If this proposed amendment is approved, 30,000,000 additional shares of our common stock will be available for future issuance or sale without further stockholder approval. However, stockholder approval of particular transactions may at the time be required by law or by the rules or policies of the Nasdaq Stock Market, upon which our common stock is currently quoted, or any other exchange or market upon which shares of our common stock may be traded or quoted in the future.

PURPOSE AND EFFECT OF THE AMENDMENT

Upon approval of this proposed amendment by our stockholders, 30,000,000 additional shares of our common stock would be authorized but unissued and unreserved. The board of directors believes that it is in the best interest of Northfield and our stockholders to have additional shares of our common stock available for various general corporate purposes, including financing transactions, strategic partnership arrangements, stock splits, stock dividends, equity compensation plans or acquisitions. The board of directors believes that the additional authorized common stock would give Northfield greater flexibility by allowing us to issue shares of our common stock without the expense and delay of a stockholders meeting to authorize additional shares if and when the need

arises.

We currently have no plans for the issuance of additional shares of common stock. We have determined, however, that securing stockholder approval of 30,000,000 additional authorized shares of our common stock is appropriate in order to provide us with the flexibility to consider possible actions that might require the future issuance of additional shares of our common stock.

If the board of directors deems it to be in the best interest of Northfield and our stockholders to issue additional shares of common stock in the future, the board of directors generally will not seek further authorization by vote of our stockholders, unless such authorization is otherwise required by law or by the rules or policies of the Nasdaq Stock Market or any other exchange or market upon which shares of our common stock may be traded or quoted in the future.

The issuance of the additional shares of our common stock may have a dilutive effect on our earnings per share and, for stockholders that do not purchase additional shares to maintain their pro rata interest in Northfield, on their percentage of voting power. In addition, the issuance of additional shares of our common stock authorized by the proposed amendment could have an anti-takeover effect. For example, the issuance of the additional shares of our common stock could discourage a potential acquiror by increasing the number of shares of our common stock necessary to gain control of Northfield, permitting us, through the public or private issuance of shares of our common stock, to dilute the stock ownership of the potential acquiror, or permitting us to privately place shares of our common stock with purchasers who would side with our board of directors in opposing a takeover bid. This proposed amendment is not being recommended in response to any specific effort of which our management is aware to accumulate shares or obtain control of Northfield or for a specific purpose other than general corporate purposes.

If this proposed amendment is approved by our stockholders, then the amendment to our Restated Certificate of Incorporation will become effective upon the filing of a Certificate of Amendment with the Secretary of State of the State of Delaware, which will occur as soon as practicable following the approval of this proposed amendment by our stockholders. Our stockholders have no dissenters' rights with respect to this proposed amendment and will have no preemptive rights in connection with the issuance of any new shares of our common stock.

The board of directors recommends a vote FOR approval of the amendment of our Restated Certificate of Incorporation to increase the number of authorized shares of common stock.

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ITEM 4. APPROVAL OF AMENDMENT TO THE NORTHFIELD LABORATORIES INC. 2003 EQUITY COMPENSATION PLAN

At Northfield's 2003 annual meeting, our stockholders approved the Northfield Laboratories Inc. 2003 Equity Compensation Plan. The board of directors has adopted an amendment to the 2003 plan that would increase the number of shares of common stock available for awards under the plan from 750,000 to 2,250,000 shares. The board of directors is recommending that stockholders approve this amendment to the 2003 plan at the annual meeting. We believe that the continued availability of shares for awards under the 2003 plan will be integral to our continuing efforts to attract and retain qualified employees, non-employee directors and consultants while continuing to preserve our financial resources.

As of July 31, 2005, a total of 1,404,125 stock options were outstanding

under the 2003 plan and our other equity compensation plans. If all of these outstanding stock options were exercised, they would represent approximately 5.0 percent of our outstanding shares of common stock.

If the proposed amendment to the 2003 plan is approved by Northfield's stockholders, a total of 1,827,740 shares will be available for future awards under the 2003 plan and our New Employee Stock Option Plan, under which option grants are limited to new employees joining Northfield. Each of our other equity compensation plans has been amended to prohibit future awards. If we were to award all of the available shares under the 2003 plan and the New Employee Stock Option Plan, and all of our 1,404,125 outstanding stock options were exercised, the total would represent approximately 10.8 percent of our outstanding shares of common stock.

The 2003 plan permits stock option grants, stock grants, restricted stock grants, restricted stock unit grants, performance stock grants, performance unit grants, stock appreciation rights grants and cash awards. We refer to awards and grants under the 2003 plan as "benefits." Those eligible for benefits under the 2003 plan are referred to as "participants." Participants include all employees, consultants and non-employee directors of Northfield.

A summary of the principal features of the 2003 plan is provided below, but is qualified in its entirety by reference to the full text of the 2003 plan that was filed electronically with this proxy statement with the Securities and Exchange Commission and is attached to this proxy statement as Annex B. A copy of the 2003 plan is also available from our company's Secretary at the address on the cover of this document.

SHARES AVAILABLE FOR ISSUANCE

If the proposed amendment to the 2003 plan is approved by Northfield's stockholders, the aggregate number of shares of our common stock that may be issued under the 2003 plan will not exceed 2,250,000 (subject to the adjustment provisions discussed below).

ADMINISTRATION AND ELIGIBILITY

The 2003 plan is administered by compensation committee of our board of directors. The committee approves the aggregate benefits and the individual benefits for the most senior elected officers and non-employee directors. The committee may delegate some of its authority under the 2003 plan in accordance with the terms of the 2003 plan.

No participant may receive in any calendar year:

- stock options relating to more than 100,000 shares;
- restricted stock or restricted stock units that are subject to the attainment of performance goals (as described below) relating to more than 50,000 shares;
- stock appreciation rights relating to more than 100,000 shares; or
- performance shares relating to more than 50,000 shares.

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No non-employee director may receive in any calendar year stock options relating to more than 50,000 shares or restricted stock units relating to more than 25,000 shares.

Each of the above limits is subject to the adjustment provisions discussed below. The maximum amount that may be earned under performance unit awards by any participant who is a covered employee within the meaning of Section $162\,(m)$ of the Code in any calendar year may not exceed \$500,000.

BENEFITS

Stock Options

Grants of Options

The committee is authorized to grant stock options to participants, or "optionees," which may be either incentive stock options, or "ISOs," or nonqualified stock options, or "NSOs." We refer to NSOs and ISOs collectively as "stock options." The exercise price of any stock option must be equal to or greater than the fair market value of the shares on the date of the grant. The term of our stock options cannot exceed 10 years. ISOs may not be granted more than 10 years after the date that the 2003 plan was originally adopted by our board of directors.

For purposes of the 2003 plan, fair market value is determined in a manner that the committee may deems equitable, or as required by applicable law or regulation. Generally, fair market value means the closing price per share for our common stock on the last trading day preceding the day of the transaction, as reported for the Nasdaq Stock Market, Inc. in the Wall Street Journal.

Exercisability and Termination

At the time of grant, the committee in its sole discretion determines when options are exercisable and when they expire.

Payment of Option Price

Payment for shares purchased upon exercise of a stock option must be made in full at the time of purchase. Payment may generally be made in cash, by the transfer to Northfield of shares owned by the participant having a fair market value on the date of transfer equal to the option exercise price, or in such other manner as may be authorized by the committee.

SARs

The committee has the authority to grant stock appreciation rights, or "SARs," to participants and to determine the number of shares subject to each SAR, the term of the SAR, the time or times at which the SAR may be exercised, and all other terms and conditions of the SAR. A SAR is a right, denominated in shares, to receive, upon exercise of the right, in whole or in part, without payment to Northfield an amount, payable in shares, in cash or a combination thereof, that is equal to the excess of the fair market value of our common stock on the date of exercise of the right over the fair market value of our common stock on the date of grant of the right, multiplied by the number of shares for which the right is exercised. The committee also may, in its discretion, substitute SARs which can be settled only in common stock for outstanding stock options at any time when Northfield is subject to fair value accounting. The terms and conditions of any substitute SAR will be substantially the same as those applicable to the stock option that it replaces and the term of the substitute SAR may not exceed the term of the stock option that it replaces.

Restricted Stock and Restricted Stock Units

Restricted stock consists of shares which are transferred or sold by Northfield to a participant, but are subject to substantial risk of forfeiture

and to restrictions on their sale or other transfer by the participant. Restricted stock units are the right to receive shares at a future date in accordance with the terms of such grant upon the attainment of certain conditions specified by the committee which include substantial risk of

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forfeiture and restrictions on their sale or other transfer by the participant. The committee determines the eligible participants to whom, and the time or times at which, grants of restricted stock or restricted stock units will be made, the number of shares or units to be granted, the price to be paid, if any, the time or times within which the shares covered by such grants will be subject to forfeiture, the time or times at which the restrictions will terminate, and all other terms and conditions of the grants. Restrictions or conditions could include the attainment of performance goals, as described below, continuous service with Northfield, the passage of time or other restrictions or conditions.

Performance Stock

A participant who is granted performance stock has the right to receive shares or cash or a combination of shares and cash equal to the fair market value of such shares at a future date in accordance with the terms of such grant and upon the attainment of performance goals specified by the committee. The award of performance stock to a participant will not create any rights in such participant as a stockholder of Northfield until the issuance of our common stock with respect to an award.

Performance Units

A participant who is granted performance units has the right to receive a payment in cash upon the attainment of performance goals specified by the committee. The committee may substitute actual shares of our common stock for the cash payment otherwise required to be made pursuant to a performance unit award.

Performance Goals

Awards of restricted stock, restricted stock units, performance stock, performance units and other incentives under the 2003 plan may be made subject to the attainment of performance goals relating to one or more business criteria within the meaning of Section 162(m) of the Code, including the attainment of specified regulatory, scientific or business milestones, increases in the price of our common stock or other goals. Any performance criteria may be used to measure the performance of Northfield as a whole or any business unit of Northfield and may be measured relative to a peer group or index.

Stock Awards

The committee may award shares of our common stock to participants without payment as additional compensation for service to Northfield. Stock awards may be subject to other terms and conditions, which may vary from time to time and among participants, as the committee determines to be appropriate.

Cash Awards

A cash award consists of a monetary payment made by Northfield to a participant as additional compensation for his or her services to Northfield. A cash award may be made in tandem with another benefit or may be made independently of any other benefit. Cash awards may be subject to other terms and conditions, which may vary from time to time and among participants, as the

committee determines to be appropriate.

AMENDMENT OF THE 2003 PLAN

Our board of directors or the committee has the right and power to amend the 2003 plan. Neither the board nor the committee, however, may amend the 2003 plan in a manner which would impair or adversely affect the rights of the holder of a benefit without the holder's consent. No material amendment of the 2003 plan may be made without stockholder approval.

TERMINATION OF THE 2003 PLAN

Our board of directors may terminate the 2003 plan at any time. Termination will not in any manner impair or adversely affect any benefit outstanding at the time of termination.

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COMMITTEE'S RIGHT TO MODIFY BENEFITS

The committee may grant benefits on terms and conditions different than those specified in the 2003 plan to comply with the laws and regulations of any foreign jurisdiction, or to make the benefits more effective under such laws and regulations. The committee may permit or require a participant to have amounts or shares of our common stock that otherwise would be paid or delivered to the participant as a result of the exercise or settlement of an award under the 2003 plan credited to a deferred compensation or stock unit account established for the participant by the committee on our company's books of account. Neither our board of directors nor the committee may cancel any outstanding stock option for the purpose of reissuing the option to the participant at a lower exercise price, or to reduce the option price of an outstanding option, in each case without obtaining prior stockholder approval.

CHANGE IN CONTROL

The committee has the right, in connection with the issuance of benefits to individual participants under the 2003 plan, to include provisions that modify the terms of the benefit upon the occurrence of a change in control of Northfield. These modifications may include, among others, the acceleration of the exercisability of stock options and SARs and the termination of restrictions on shares of restricted stock and restricted stock units. The 2003 plan includes provisions that require the exercise or forfeiture of stock options and SARs in connection with certain change in control transactions. Alternatively, the committee has the option under the 2003 plan to cause the continuing or successor entity following a change in control transaction to assume the obligations of Northfield under the 2003 plan.

ADJUSTMENTS

If there is any change in our common stock by reason of any stock split, stock dividend, spin-off, split-up, spin-out, recapitalization, merger, consolidation, reorganization, combination or exchange of shares, the total number of shares available for benefits, the maximum number of shares which may be subject to an award in any calendar year and the number of shares subject to outstanding benefits, and the price of each of the foregoing, as applicable, will be equitably adjusted by the committee in its discretion.

REUSAGE

If a stock option granted under the 2003 plan expires or is terminated, surrendered or canceled without having been fully exercised or if restricted

stock, restricted stock units, performance shares or SARs granted under the 2003 plan are forfeited or terminated without the issuance of all of the shares subject thereto, the shares covered by such benefits will again be available for use under the 2003 plan. Shares covered by a benefit granted under the 2003 plan are not counted as used unless and until they are actually issued and delivered to a participant. Any shares of common stock covered by a SAR are counted as used only to the extent shares are actually issued to the participant upon exercise of the SAR. The number of shares that are transferred to Northfield by a participant to pay the exercise or purchase price of a benefit are subtracted from the number of shares issued with respect to such benefit for the purpose of counting shares used. Shares withheld to pay withholding taxes in connection with the exercise or payment of a benefit are not counted as used. Shares covered by a benefit granted under the 2003 plan that is settled in cash are not counted as used.

FEDERAL INCOME TAX CONSEQUENCES

We have been advised by counsel that the federal income tax consequences as they relate to benefits are as follows:

NSOs

An optionee does not recognize taxable income upon the grant of an NSO. Upon the exercise of such a stock option, the optionee recognizes ordinary income to the extent the fair market value of the shares received upon exercise of the NSO on the date of exercise exceeds the exercise price. Northfield receives an income tax

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deduction in an amount equal to the ordinary income that the optionee recognizes upon the exercise of the stock option.

ISOs

An optionee does not generally recognize taxable income upon the grant or upon the exercise of an ISO. Upon the sale of ISO shares, the optionee recognizes income in an amount equal to the difference, if any, between the exercise price of the ISO shares and the fair market value of those shares on the date of sale. The income is taxed at long-term capital gains rates if the optionee has not disposed of the stock within two years after the date of the grant of the ISO and has held the shares for at least one year after the date of exercise and Northfield is not entitled to a federal income tax deduction. The holding period requirements are waived when an optionee dies. The exercise of an ISO may in some cases trigger liability for the alternative minimum tax. If an optionee sells ISO shares before having held them for at least one year after the date of exercise and two years after the date of grant, the optionee recognizes ordinary income to the extent of the lesser of the gain realized upon the sale or the difference between the exercise price and the fair market value of the shares on the date of exercise. Any additional gain is treated as long-term or short-term capital gain depending upon how long the optionee has held the ISO shares prior to disposition. In the year of disposition, Northfield receives a federal income tax deduction in an amount equal to the ordinary income that the optionee recognizes as a result of the disposition.

Restricted Stock

A participant who receives an award of restricted stock does not generally recognize taxable income at the time of the award. Instead, the participant recognizes ordinary income in the first taxable year in which his or her interest in the shares becomes either freely transferable or no longer subject

to substantial risk of forfeiture. The amount of taxable income is equal to the fair market value of the shares less the cash, if any, paid for the shares. A participant may elect to recognize income at the time he or she receives restricted stock in an amount equal to the fair market value of the restricted stock, less any cash paid for the shares, on the date of the award. Northfield receives a compensation expense deduction in an amount equal to the ordinary income recognized by the participant in the taxable year in which restrictions lapse, or in the taxable year of the award if, at that time, the participant had filed a timely election to accelerate recognition of income.

Other Benefits

In the case of an exercise of an SAR or an award of restricted stock units, performance stock, performance units, common stock or cash, the participant will generally recognize ordinary income in an amount equal to any cash received and the fair market value of any shares received on the date of payment or delivery. In that taxable year, Northfield will receive a federal income tax deduction in an amount equal to the ordinary income which the participant has recognized.

MILLION DOLLAR DEDUCTION LIMIT

Northfield may not deduct compensation of more than \$1,000,000 that is paid to an individual who, on the last day of the taxable year, is either our chief executive officer or is among one of the four other most highly-compensated officers for that taxable year as reported in our proxy statement. The limitation on deductions does not apply to certain types of compensation, including qualified performance-based compensation. We believe that benefits in the form of stock options, performance stock, performance units, SARs, performance-based restricted stock and restricted stock units and cash payments under management incentive awards constitute qualified performance-based compensation and, as such, will be exempt from the \$1,000,000 limitation on deductible compensation.

MISCELLANEOUS

A new benefits table is not provided because no grants have been made with respect to the additional shares of common stock proposed to be included under the 2003 plan and all future benefits are discretionary.

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If stockholders fail to approve the proposed amendment to the 2003 plan, then the terms of the 2003 plan as originally approved by stockholders at Northfield's 2003 annual meeting will continue in effect.

RECOMMENDATION OF THE BOARD

The board of directors recommends a vote FOR approval of amendment to the Northfield Laboratories Inc. 2003 Equity Compensation Plan.

PROCEDURE FOR SUBMITTING STOCKHOLDER PROPOSALS AND NOMINATIONS

Stockholders may present proper proposals for inclusion in Northfield's proxy statement and for consideration at the next annual meeting of our stockholders by submitting their proposals to us in a timely manner. In order to be included in our proxy statement for our next annual meeting, stockholder proposals must be received by us no later than April 17, 2006, and must otherwise comply with the requirements of the applicable rules of the Securities and Exchange Commission.

In addition, our bylaws establish an advance notice procedure with regard to certain matters, including stockholder nominations for director and stockholder proposals not included in our proxy statement, to be brought before any annual meeting of stockholders. In general, notice must be received by our corporate secretary not less than 60 days nor more than 90 days prior to the date of the annual meeting, except if less than 70 days' notice or prior public disclosure of the date of the meeting is given or made to our stockholders, in which event notice by the stockholders to be timely must be received no later than the close of business on the tenth day following the date on which notice of the date of the annual meeting was mailed or public disclosure was made. It is currently expected that our 2006 annual meeting of stockholders will be held on or about September 30, 2006. Therefore, the deadline under our bylaws for timely submission of director nominations and stockholder proposals for consideration at our 2006 annual meeting is currently expected to be July 31, 2006. Stockholder nominations for director are also required under our bylaws to include certain information regarding the director nominee and the stockholder making the nomination.

All notice of proposals by stockholders, whether or not to be included in our proxy materials, should be sent to Northfield Laboratories Inc., 1560 Sherman Avenue, Suite 1000, Evanston, Illinois 60201-4800, Attention: Corporate Secretary.

GENERAL

The board of directors does not know of any other matters to be presented at the annual meeting. If any additional matters are properly presented, the persons named in the proxy will have discretion to vote in accordance with their own judgment on these matters.

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ANNEX A

ARTICLE 5 OF THE RESTATED CERTIFICATE OF NORTHFIELD LABORATORIES INC. INDICATING PROPOSED AMENDMENT

5. Authorized Capital Stock. The total number of shares of stock which the Corporation shall have authority to issue is 65,000,000 shares, consisting of 60,000,000 shares of Common Stock, par value \$.01 per share (the "Common Stock"), and 5,000,000 shares of Preferred Stock, par value \$.01 per share (the "Preferred Stock").

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ANNEX B

NORTHFIELD LABORATORIES INC. 2003 EQUITY COMPENSATION PLAN

AS AMENDED AND RESTATED EFFECTIVE AS OF SEPTEMBER 29, 2005

1. Purpose. The purposes of the Northfield Laboratories Inc. 2003 Equity Compensation Plan (the "Plan") are to (a) encourage outstanding individuals to accept or continue service as employees, consultants and directors of Northfield Laboratories Inc. (the "Company") and (b) to furnish additional incentives to those persons to achieve the Company's business goals and objectives and to strengthen the mutuality of interest between those persons and the Company's stockholders by providing them stock options and other stock and cash

incentives.

- 2. Administration. The Plan will be administered by a Committee (the "Committee") of the Company's Board of Directors consisting of two or more directors as the Board may designate from time to time, each of whom will satisfy such requirements as:
 - (a) the Securities and Exchange Commission may establish for administrators acting under plans intended to qualify for exemption under Rule 16b-3 or its successor under the Securities Exchange Act of 1934, as amended (the "Exchange Act");
 - (b) the Nasdaq Stock Market, Inc. may establish pursuant to its rule-making authority; and
 - (c) the Internal Revenue Service may establish for outside directors acting under plans intended to qualify for exemption under Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code").

The Committee will have the authority to construe and interpret the Plan and any benefits granted thereunder, to establish and amend rules for plan administration, to change the terms and conditions of options and other benefits at or after grant, and to make all other determinations which it deems necessary or advisable for the administration of the Plan. The determinations of the Committee will be made in its sole discretion in accordance with its judgment as to the best interests of the Company and its stockholders and in accordance with the purposes of the Plan. A majority of the members of the Committee will constitute a quorum, and all determinations of the Committee will be made by a majority of its members. Any determination of the Committee under the Plan may be made without notice or meeting of the Committee, in writing signed by all the Committee members. The Committee may authorize one or more officers of the Company to select employees to participate in the Plan and to determine the number of option shares and other rights to be granted to such participants, except with respect to awards to officers subject to Section 16 of the Exchange Act or officers who are or may become "covered employees" within the meaning of Section 162(m) of the Code ("Covered Employees"), and any reference in the Plan to the Committee will include such officer or officers.

- 3. Participants. Participants will consist of all employees, consultants and non-employee directors of the Company. Designation of a participant in any year will not require the Committee to designate that person to receive a benefit in any other year or to receive the same type or amount of benefit as granted to the participant in any other year or as granted to any other participant in any year. The Committee may consider all factors that it deems relevant in selecting participants and in determining the type and amount of their respective benefits.
- 4. Shares Available under the Plan. There is hereby reserved for issuance under the Plan an aggregate of 2,250,000 shares of the Company's Common Stock, par value \$.01 per share ("Common Stock"). If there is a lapse, expiration, termination or cancellation of any Stock Option issued under the Plan prior to the issuance of shares thereunder or if shares of Common Stock are issued under the Plan and thereafter are reacquired by the Company, the shares subject to the Stock Option and the reacquired shares will be added to the shares available for benefits under the Plan. Shares covered by a benefit granted under the Plan will not be counted as used unless and until they are actually issued and delivered to a participant. Any shares covered by

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a Stock Appreciation Right will be counted as used only to the extent shares are actually issued to the participant upon exercise of the right. In addition, any

shares of Common Stock exchanged by an optionee as full or partial payment to the Company of the exercise price under any Stock Option exercised under the Plan, any shares retained by the Company pursuant to a participant's tax withholding election, and any shares covered by a benefit which is settled in cash will be added to the shares available for benefits under the Plan. All shares issued under the Plan may be either authorized and unissued shares or issued shares reacquired by the Company. Under the Plan, no participant may receive in any calendar year (a) Stock Options relating to more than 100,000 shares, (b) Restricted Stock or Restricted Stock Units that are subject to the attainment of Performance Goals (as defined in Section 12) relating to more than 50,000 shares, (c) Stock Appreciation Rights relating to more than 100,000 shares or (d) Performance Shares relating to more than 50,000 shares. No non-employee director may receive in any calendar year Stock Options relating to more than 50,000 shares or Restricted Stock Units relating to more than 25,000 shares. The shares reserved for issuance and the limitations set forth above will be subject to adjustment in accordance with Section 13. All of the available shares may, but need not, be issued pursuant to the exercise of Incentive Stock Options.

- 5. Types of Benefits. Benefits under the Plan will consist of Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Stock, Performance Units and Other Stock or Cash Awards, all as described below.
- 6. Stock Options. Stock Options may be granted to participants, at any time as determined by the Committee. The Committee will determine the number of shares subject to each option and whether the option is an Incentive Stock Option. The option price for each option will be determined by the Committee but will not be less than 100% of the fair market value of the Common Stock on the date the option is granted. Each option will expire at such time as the Committee will determine at the time of grant. Options will be exercisable at such time and subject to such terms and conditions as the Committee will determine; provided that no option will be exercisable later than the tenth anniversary of its grant. The option price, upon exercise of any option, will be payable to the Company in full by (a) cash payment or its equivalent, (b) tendering previously acquired shares (held for at least six months) having a fair market value at the time of exercise equal to the option price or certification of ownership of such previously-acquired shares, (c) delivery of a properly executed exercise notice, together with irrevocable instructions to a broker to promptly deliver to the Company the amount of sale proceeds from the option shares or loan proceeds to pay the exercise price and any withholding taxes due to the Company and (d) such other methods of payment as the Committee deems appropriate. In no event will the Committee cancel any outstanding Stock Option for the purpose of reissuing the option to the participant at a lower exercise price or reduce the option price of an outstanding option, in each case without prior stockholder approval.
- 7. Stock Appreciation Rights. Stock Appreciation Rights may be granted to participants at any time as determined by the Committee. A Stock Appreciation right may be granted in tandem with a Stock Option granted under the Plan or on a free-standing basis. The Committee also may substitute Stock Appreciation Rights which can be settled only in stock for outstanding Stock Options at any time. The grant price of a tandem or substitute Stock Appreciation Rights will be equal to the option price of the related option. The grant price of a free-standing Stock Appreciation Rights will be equal to the fair market value of the Common Stock on the date of its grant. A Stock Appreciation Right may be exercised upon such terms and conditions and for the term as the Committee determines; provided that the term will not exceed the option term in the case of a tandem or substitute Stock Appreciation Rights or ten years in the case of a free-standing Stock Appreciation Right and the terms and conditions applicable to a substitute Stock Appreciation Right will be substantially the same as those applicable to the Stock Option which it replaces. Upon exercise of a Stock

Appreciation Right, the participant will be entitled to receive payment from the Company in an amount determined by multiplying the excess of the fair market value of a share of Common Stock on the date of exercise over the grant price of the Stock Appreciation Right by the number of shares with respect to which the Stock Appreciation Right is exercised. The payment may be made in cash or stock, at the discretion of the Committee, except in the case of a substitute Stock Appreciation Right, which may be made only in stock.

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- 8. Restricted Stock and Restricted Stock Units. Restricted Stock and Restricted Stock Units may be awarded or sold to participants under such terms and conditions as may be established by the Committee. Restricted Stock and Restricted Stock Units will be subject to such restrictions as the Committee determines, including, without limitation, any of the following:
 - (a) a prohibition against sale, assignment, transfer, pledge, hypothecation or other encumbrance for a specified period; or
 - (b) a requirement that the holder forfeit (or in the case of shares or units sold to the participant resell to the Company at cost) such shares or units in the event of termination of employment during the period of restriction.
 - All restrictions will expire at such times as the Committee may specify.
- 9. Performance Stock. The Committee may designate the participants to whom long-term performance stock ("Performance Stock") is to be awarded and determine the number of shares, the length of the performance period and the other terms and conditions of each such award. Each award of Performance Stock will entitle the participant to a payment in the form of shares of Common Stock upon the attainment of performance goals and other terms and conditions specified by the Committee. Notwithstanding satisfaction of any performance goals, the number of shares issued under a Performance Stock award may be adjusted by the Committee on the basis of such further consideration as the Committee may determine; provided that the Committee may not, in any event, increase the number of shares earned upon satisfaction of any performance goal by any participant who is a Covered Employee. The Committee may make a cash payment equal to the fair market value of shares of Common Stock otherwise required to be issued to a participant pursuant to a Performance Stock award.
- 10. Performance Units. The Committee may designate the participants to whom long-term performance units ("Performance Units") are to be awarded and determine the number of units and the terms and conditions of each such award. Each Performance Unit award will entitle the participant to a payment in cash upon the attainment of performance goals and other terms and conditions specified by the Committee. Notwithstanding the satisfaction of any performance goals, the amount to be paid under a Performance Unit award may be adjusted by the Committee on the basis of such further consideration as the Committee will determine; provided that the Committee may not, in any event, increase the amount earned under Performance Unit awards upon satisfaction of any performance goal by any participant who is a Covered Employee and the maximum amount earned by a Covered Employee in any calendar year may not exceed \$500,000. The Committee may substitute actual shares of Common Stock for the cash payment otherwise required to be made to a participant pursuant to a Performance Unit award.
- 11. Other Stock or Cash Awards. In addition to the incentives described in Sections 6 through 10, the Committee may grant other incentives payable in cash or in Common Stock under the Plan as it determines to be in the best interests of the Company and its stockholders and subject to such other terms and

conditions as it deems appropriate.

- 12. Performance Goals. Awards of Restricted Stock, Restricted Stock Units, Performance Stock, Performance Units and other incentives under the Plan may be made subject to the attainment of performance goals relating to one or more business criteria within the meaning of Section 162(m) of the Code ("Performance Criteria"). Any Performance Criteria may be used to measure the performance of the Company as a whole or any business unit of the Company and may be measured relative to a peer group or index. Performance Criteria may be calculated in accordance with the Company's financial statements, generally accepted accounting principles or under a methodology established by the Committee prior to the issuance of an award which is consistently applied and identified in the audited financial statements, including footnotes, or the Management Discussion and Analysis section of the Company's annual report.
- 13. Adjustment Provisions. If the Company at any time changes the number of issued shares of Common Stock by stock dividend, stock split, spin-off, split-off, spin-out, recapitalization, merger, consolidation, reorganization, combination or exchange of shares, the total number of shares reserved for issuance under the Plan, the maximum number of shares which may be made subject to an award in any calendar year, and

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the number of shares covered by each outstanding award and the price therefor, if any, will be equitably adjusted by the Committee.

14. Terminating Events. The Company, at its option, may give any or all of the participants at least 10 business days written notice (or, if such notice period is not practicable, such shorter notice period as the Company determines in good faith is practicable) prior to the anticipated date of the consummation of a Terminating Event. Upon receipt of such notice, and for a period of five business days thereafter (or such other period as may be specified in the Company's notice with respect to the Terminating Event), each participant receiving such notice will be permitted to exercise, in whole or in part, the vested and unexercised portion of each Stock Option or Stock Appreciation Right held by such participant in accordance with the terms and conditions of the Plan and the award agreement relating to such Stock Option or Stock Appreciation Right. Upon the consummation of the Terminating Event, all Stock Options and Stock Appreciation Rights will be canceled and forfeited to the extent they have not been exercised in accordance with the provisions of this Section 14. If the Terminating Event is not consummated, all Stock Options and Stock Appreciation Rights exercised pursuant to the Company's notice of the Terminating Event will be deemed not to have been exercised and will thereafter be exercisable to the same extent and on the same terms and conditions as if notice of the Terminating Event had not been given by the Company. In lieu of delivering notice of a Terminating Event pursuant to this Section 14, the Company, at its option, may cause the successor or acquiring corporation in connection with any Terminating Event or, if applicable, the corporate parent of any such corporation (the "Successor Corporation"), to assume in writing the obligations of the Company under the Plan and the outstanding award agreements entered into pursuant to the Plan. In such event, the number and kind of shares acquirable upon the exercise of the Stock Options and Stock Appreciation Rights and the exercise price applicable thereto will be adjusted appropriately and the Stock Options and Stock Appreciation Rights as so adjusted will be deemed solely to represent rights to acquire shares of the Successor Corporation in the manner provided in the agreements between the Company and the Successor Corporation. For purposes of this Section 14, "Terminating Event" means any (a) sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all or substantially all of the Company's assets or (b) consolidation or merger of the Company in which the Company is not the surviving or continuing corporation, or pursuant to which shares of the Company's Common Stock would be converted

into cash, securities or other property, other than a merger of the Company in which the holders of Common Stock immediately prior to the merger have, directly or indirectly, at least an 80% ownership interest in the outstanding Common Stock of the surviving corporation immediately after the merger.

- 15. Nontransferability. Each benefit granted under the Plan will not be transferable otherwise than by will or the laws of descent and distribution and each Stock Option and Stock Appreciation Right will be exercisable during the participant's lifetime only by the participant or, in the event of disability, by the participant's personal representative. In the event of the death of a participant, exercise of any benefit or payment with respect to any benefit will be made only by or to the executor or administrator of the estate of the deceased participant or the person or persons to whom the deceased participant's rights under the benefit will pass by will or the laws of descent and distribution. Notwithstanding the foregoing, the Committee may permit the transfer of a Stock Option or Stock Appreciation Right by the participant, subject to such terms and conditions as may be established by the Committee.
- 16. Taxes. The Company will be entitled to withhold the amount of any tax attributable to any amounts payable or shares deliverable under the Plan, after giving the person entitled to receive such payment or delivery notice and the Company may defer making payment or delivery as to any award, if any such tax is payable until indemnified to its satisfaction. A participant may pay all or a portion of any required withholding taxes arising in connection with the exercise of a Stock Option or Stock Appreciation Right or the receipt or vesting of shares hereunder by electing to have the Company withhold shares of Common Stock, having a fair market value equal to the amount required to be withheld.
- 17. Duration, Amendment and Termination. No award of any benefit under the Plan will be made more than ten years after the date of adoption of the Plan by the Board of Directors; provided that the terms and conditions applicable to any option granted on or before such date may thereafter be amended or modified by mutual agreement between the Company and the participant, or such other person as may then have an

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interest therein. The Board of Directors or the Committee may amend the Plan from time to time or terminate the Plan at any time; provided that no such action will reduce the amount of any existing award or change the terms and conditions thereof without the participant's consent. No material amendment of the Plan will be made without stockholder approval.

- 18. Fair Market Value. The fair market value of the Common Stock at any time will be determined in such manner as the Committee may deem equitable or as required by applicable law or regulation.
- 19. Other Provisions. The award of any benefit under the Plan may also be subject to other provisions (whether or not applicable to the benefit awarded to any other participant) as the Committee determines appropriate, including provisions intended to comply with federal or state securities laws and stock exchange requirements, understandings or conditions as to the participant's employment, requirements or inducements for continued ownership of Common Stock after exercise or vesting of benefits, acceleration of benefits upon the occurrence of a change in control of the Company or other events determined by the Committee, forfeiture of awards in the event of termination of employment after exercise or vesting, or breach of noncompetition or confidentiality agreements following termination of employment, or provisions permitting the deferral of the receipt of a benefit for such period and upon such terms as the Committee may determine. If any benefit under the Plan is granted to an employee who is employed or providing services outside the United States and who is not compensated from a payroll maintained in the United States, the Committee may

modify the provisions of the Plan as they pertain to such individuals to comply with applicable law, regulation or accounting rules. The Committee may permit or require a participant to have amounts or shares of Common Stock that otherwise would be paid or delivered to the participant as a result of the exercise or settlement of an award under the Plan credited to a deferred compensation or stock unit account established for the participant by the Committee on the Company's books of account.

- 20. Governing Law. The Plan and any actions taken in connection herewith will be governed by and construed in accordance with the laws of the state of Delaware without regard to applicable conflict of law principles.
- 21. Stockholder Approval. The Plan was originally adopted by the Board of Directors on July 10, 2003 and approved by the stockholders of the Company on September 17, 2003. An amendment and restatement of the Plan to increase the number of shares available under the Plan from 750,000 to 2,250,000 shares of Common Stock was adopted by the Board of Directors on July 14, 2005, subject to stockholder approval. The foregoing amendment to the Plan will not become effective if stockholder approval is not obtained at the Company's next annual meeting of stockholders and, in such event, the Plan as originally adopted and approved will continue in full force and effect.

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Proxy - Northfield Laboratories Inc.

ANNUAL MEETING OF STOCKHOLDERS - SEPTEMBER 29, 2005
THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned stockholder of Northfield Laboratories Inc. hereby appoints Jack J. Kogut and Steven Fleck, and each of them, attorneys and proxies with full power of substitution, to vote at the Annual Meeting of the Stockholders of Northfield Laboratories Inc. to be held on Thursday, September 29, 2005, at 10:00 A.M., local time, at The Deer Path Inn, 255 East Illinois Road, Lake Forest, Illinois, 60045, and at any adjournment or postponement thereof, in the name of the undersigned and with the same force and effect as if the undersigned were present and voting such shares, on the following matters and in the following manner.

THE SHARES REPRESENTED BY THIS PROXY WILL BE VOTED IN ACCORDANCE WITH THE SPECIFICATIONS MADE HEREON. IF NO SPECIFICATION IS MADE, THE SHARES REPRESENTED BY THIS PROXY WILL BE VOTED BY EACH OF THE ABOVE PERSONS, FOR EACH OF THE PROPOSALS TO BE PRESENTED AT THE ANNUAL MEETING AND FOR SUCH OTHER MATTERS AS MAY PROPERLY COME BEFORE THE ANNUAL MEETING AS THE ABOVE PERSONS MAY DEEM ADVISABLE.

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

(Continued and to be signed on reverse side.)

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ADD	3	000000000.000 ext
ADD	4	000000000.000 ext
ADD	5	
ADD	6	HOLDER ACCOUNT NUMBER
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		[BAR CODE]
		// Mark this box with
		an X if you have
		made changes to your
		name or address
		details above.

ANNUAL MEETING PROXY CARD

PLEASE REFER TO THE REVERSE SIDE FOR TELEPHONE AND INTERNET VOTING INSTRUCTIONS.

- A ELECTION OF DIRECTORS
- 1. The Board of Directors recommends a vote FOR the listed nominees.

FOR WITHHOLD FOR

01 - Steven A. Gould, M.D. // // 05 - Jack Olshansky //
02 - John F. Bierbaum // // 06 - David A. Savner //
03 - Bruce S. Chelberg // // 07 - Edward C. Wood, Jr. //
04 - Paul M. Ness, M.D. // //

B PROPOSALS

The Board of Directors recommends a vote FOR the following proposals.

	FOR	AGAINST	ABSTAIN
2. To ratify the appointment of KPMG LLP as independent auditors of the Company to serve for the Company's 2006 fiscal year.	//	//	//
3. To approve a proposal to amend the Company's Restated Certificate of Incorporation to increase the number of authorized shares of the Company's Common Stock, par value \$.01 per share, from 30,000,000 to 60,000,000 shares.	//	//	//
22, 222, 222, 22, 223, 222, 222, 222, 2	//	//	//
4. To approve an amendment to the Northfield Laboratories Inc. 2003 Equity Compensation Plan to increase the number of shares availabl for awards under the Plan from 750,000 to	е		

2,250,000 shares.

5. In their discretion, to act in any other matters which may properly come before the Annual Meeting and any adjournment or postponement thereof.	//	//	//
C AUTHORIZED SIGNATURES - SIGN HERE - THIS SECTION MUST BE COMPLETED INSTRUCTIONS TO BE EXECUTED.	FOR YO	DUR	
NOTE: Sign exactly as your name(s) appear hereon. When signing as attoradministrator, trustee, guardian or any other representative capacity, indicate. Please sign in the box(s) below to validate this proxy.		e so	

Signature 2 - Please keep signature within the box

Date (mm/dd/yyyy)

/ /

1 UPX HHH PPPP 004041 +

TELEPHONE AND INTERNET VOTING INSTRUCTIONS

Signature 1 - Please keep signature within the box

YOU CAN VOTE BY TELEPHONE OR THE INTERNET! AVAILABLE 24 HOURS A DAY 7 DAYS A WEEK!

Instead of mailing your proxy, you may choose one of the two voting methods outlined below to vote your proxy.

[PHONE LOGO] To vote using the Telephone (within the U.S. and Canada)

- Call toll free 1-866-601-0658 in the United States or Canada any time on a touch tone telephone.

 There is NO CHARGE to you for the call.
- Follow the simple instructions provided by the recorded message.

[COMPUTER MOUSE LOGO] To vote using the Internet

- Go to the following web site: WWW.COMPUTERSHARE.COM/US/PROXY
- Enter the information requested on

your computer screen and follow the simple instructions.

HOLDER ACCOUNT NUMBER C0123456789

PROXY ACCESS NUMBER 12345

If you vote by telephone or the Internet, please DO NOT mail back this proxy card. Proxies submitted by the Internet must be received by 1:00 a.m., Central Time, on September 29, 2005. THANK YOU FOR VOTING