NORTHFIELD LABORATORIES INC /DE/ Form DEF 14A August 16, 2004

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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 the Registrant $[X]$ Filed by a Party other than the Registrant $[\]$				
Check the appropriate box:				
<pre>[] 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</pre>				
NOTURITIES LABORATORIES INC.				
(Name of Registrant as Specified In Its Charter)				
(Name of Person(s) Filing Proxy Statement, if other than the Registrant)				
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[X] No fee required.				
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1) Title of each class of securities to which transaction applies:				
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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 filing fee is calculated and state how it was determined):

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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 21, 2004

TO THE STOCKHOLDERS OF NORTHFIELD LABORATORIES INC:

The Annual Meeting of the stockholders of Northfield Laboratories Inc. (the "Company") will be held on Tuesday, September 21, 2004 at 10:00 A.M., local time, at the Third Floor, 1560 Sherman Avenue, Evanston, Illinois 60201-4800, for the following purposes:

 To elect six directors to hold office until the next Annual Meeting of the stockholders of the Company;

- 2. To ratify the appointment of KPMG LLP as independent auditors of the Company to serve for the Company's 2005 fiscal year; and
- 3. To transact such other business as may properly come before the Annual Meeting.

The Board of Directors has fixed the close of business on July 26, 2004 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 16, 2004

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.

PROXY STATEMENT

NORTHFIELD LABORATORIES INC.

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 Tuesday, September 21, 2004, commencing at 10:00 A.M., local time, at the Third Floor, 1560 Sherman Avenue, Evanston, Illinois 60201-4800, 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 $August\ 16$, 2004.

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 Web site at www.northfieldlabs.com. The information contained on our Web site 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 July 26, 2004, the record date for the annual meeting, are entitled to notice of and to vote at the annual meeting. As of July 26, 2004, there were 21,404,439 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.

REQUIRED 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. The affirmative vote of a majority of the shares present at the annual meeting will be required to approve each of the proposals to be considered at the annual meeting. Shares that are present and entitled to vote, but which withhold their votes or abstain from voting on a proposal, will have the effect of votes against the proposal.

If any nominee for director fails to receive the affirmative vote of a majority of the shares present at the annual meeting, the majority of the directors then in office will be entitled under our certificate of incorporation and bylaws to fill the resulting vacancy in the board of directors. Each director chosen in this manner will hold office for a term expiring at our next annual meeting of stockholders.

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 2004 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 six. 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 current directors for reelection at the annual meeting. In the event any of the nominees should become unavailable for election, the nominating 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.

	DIRECTOR		PRINCIPAL OCCUPATION AND
NAME	SINCE	OFFICE	BUSINESS EXPERIENCE

Steven A. Gould, M.D. 1993

Chairman and Officer

Dr. Gould, age 57, is a founding member Chief Executive Northfield's scientific team and has se as the Chairman and Chief Executive Off of Northfield since July 2002. From Jul 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 f Northfield's clinical trials. From 1989 1993, Dr. Gould served as Chief of the Department of Surgery of Michael Reese Hospital. Since 1990, Dr. Gould has als served as Professor of Surgery, nonsala at the University of Illinois College of Medicine. From 1979 through 1989, Dr. G was Assistant Professor and then Associ Professor in the Department of Surgery The University of Chicago School of Medicine. Dr. Gould has been involved i development of national transfusion pol through his participation in the activi of the National Heart Lung Blood Instit the National Blood Resource Education P the Department of Defense, the American Association of Blood Banks, the America College of Surgeons and The American Re

John F. Bierbaum...... 2002 Director

Cross. Dr. Gould received his M.D. degr from the Boston University School of Medicine in 1973.

Mr. Bierbaum, age 60, has served as a director of Northfield since September Mr. Bierbaum has since March 2003 serve the Executive Vice President of Pohlad Companies. Prior to that, Mr. Bierbaum served as a senior officer of PepsiAmer Inc. and its predecessors. Mr. Bierbaum C.P.A. and received his B.S. degree frou University of Minnesota in 1967.

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NAME 	DIRECTOR SINCE	OFFICE	PRINCIPAL OCCUPATION AND BUSINESS EXPERIENCE
Bruce S. Chelberg	1989	Director	Mr. Chelberg, age 70, has served as a 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., Snap-On Incorporated and Actuant Corporation. Mr. Chelberg recei his LLB degree from the University Of Illinois College of Law in 1958.
Paul M. Ness, M.D	2002	Director	Dr. Ness, age 58, 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 Director 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 75, 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

David A. Savner..... 1998 Director

Laboratories, a division of American Hospital Supply Corporation, and as Vic President of the Medical Division of Cu Laboratories. Mr. Olshansky received hi B.A. degree from Brooklyn College in 19 Mr. Savner, age 60, 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.

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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

Nominating and Corporate -- David Savner (Chairman) Governance Committee

Paul M. Ness

Compensation Committee -- Jack Olshansky (Chairman)

Bruce S. Chelberg

DIRECTOR INDEPENDENCE AND EXECUTIVE SESSIONS

The board of directors has determined that each of the non-management directors, Messrs. Bierbaum, Chelberg, Olshansky, Ness and Savner, 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.

The Nasdaq listing standards require that we implement Nasdaq's recently revised requirements regarding director independence, independent committees and regularly scheduled executive sessions at which only independent directors are present by the date of the annual meeting. It is presently contemplated that these executive sessions will occur at least twice during our 2005 fiscal year, in conjunction with regularly scheduled board meetings, in addition to the separate meetings of the standing committees of the board of directors.

AUDIT COMMITTEE

Meetings. During our 2004 fiscal year, the audit committee met four times. Each of the audit committee's members participated in all meetings of the committee.

Charter and Purposes. The charter of the audit committee is attached as Appendix A to this document and is also available on our Web site as described below under "Corporate Governance and Web Site 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 and Executive Sessions." 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

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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 2004 fiscal year, the nominating and corporate governance committee met one time. Each of the nominating and corporate governance committee's members participated in all meetings of the committee.

Charter and Purposes. The charter of the nominating and corporate governance committee is available on our Web site as described below under "Corporate Governance and Web Site 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 this committee are independent as described above under "Director Independence and Executive Sessions."

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 2004 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 Web site as described below under "Corporate Governance and Web Site 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.

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Members. The Board of Directors has determined that the members of this committee are independent as described above under "Director Independence and Executive Sessions."

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 AND WEB SITE INFORMATION

We believe that we will be in compliance with the corporate governance requirements of the Nasdaq listing standards 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 attached as Appendix A to this document; 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 and our code of business conduct and ethics are available without charge on the our Web site at www.northfieldlabs.com.

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 5,000 stock options and the share equivalent of \$15,000 in stock. 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 priced at fair market value and 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 2004 fiscal year.

DIRECTOR ATTENDANCE

We encourage our directors to attend our annual meetings, but we have not adopted a formal policy requiring attendance. At our 2003 annual meeting four 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
Jay H. Kleiman, M.D., M.P.A	Vice President Clinical Affairs
Robert L. McGinnis	Vice President Planning and Resource Development
Sophia H. Twaddell	Vice President Corporate Communications

A biographical summary of the business experience of Dr. Gould is included under "Election of Directors."

Mr. Koqut, age 57, 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 45, 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 since December 1994. 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 39, 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. Dr. Essig received her Ph.D. degree in neuropharmacology from Bristol University, Bristol, U.K. in 1990.

Dr. Kleiman, age 58, has served as Vice President Clinical Affairs since August 2003. From 1998 to 2003, Dr. Kleiman served as Medical Director, Cardiovascular/Metabolic Clinical Research at Searle-Pharmacia, now Pfizer Inc. Prior to that time, he was Director, Interventional Cardiovascular Services at St. Joseph Hospital, Chicago. Dr. Kleiman received his M.D. degree from the University of Michigan in 1971, and an M.P.A. from the John F. Kennedy School of Government at Harvard University in 1998.

Mr. McGinnis, age 40, 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.

Ms. Twaddell, age 52, 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 in Chicago. 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

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 COMPE

Officer(3)	2002	298 , 682	147,487	30,830	
Jack J. Kogut	2004	253 , 125		27,940	56,250
Senior Vice President and	2003	244,124		27,453	
Chief Financial Officer	2002	235,888	116,479	25,052	
Marc D. Doubleday	2004	178 , 869		11,528	11,250
Vice President and General	2003	171,784		10,454	
Manager	2002	163,604	39,423	11,259	
Jay H. Kleiman, M.D.,					
M.P.A	2004	181,731	30,000	8,475	
Vice President Clinical	2003				
Affairs(4)	2002				
Robert L. McGinnis	2004	165,730	20,000	10,113	
Vice President Planning and	2003	159,166		9,102	
Resource Development	2002	151 , 587	36,527	10,164	

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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

NAME 	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED	PERCENT OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE (\$/SH)	EXPIRATION DATE	POTENTIAL R VALUE AT ANNUAL RATE PRICE APPREC OPTION T
Steven A. Gould, M.D	100,000	28	7.50	1/16/14	471,671
Jack J. Kogut	50,000	14	7.50	1/16/14	235,835
Marc D. Doubleday	25,000	7	5.94	11/3/13	93,391
Jay Kleiman, M.D., M.P.A	50,000	14	7.43	8/4/13	233,634
Robert L. McGinnis	25,000	7	5.94	11/3/13	93,391

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⁽¹⁾ Our fiscal year begins on June 1 and ends on May 31. Our 2004 fiscal year ended May 31, 2004.

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

⁽³⁾ Dr. Gould was elected as our Chief Executive Officer in July 2002.

⁽⁴⁾ Dr. Kleiman became our Vice President Clinical Affairs in August 2003.

⁽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

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 2004 fiscal year and the aggregate value as of May 31, 2004 of unexercised stock options held by these individuals.

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

NAME 	SHARES ACQUIRED EXERCISE(#)	VALUE REALIZED(\$)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT FISCAL YEAR-END EXERCISABLE/UNEXERCISABLE	VALUE C IN-THE- AT FISC EXERCISAB
Steven A. Gould, M.D			126,250/178,750	444,8
Jack J. Kogut	15,000	97,500	96,500/90,500	265
Marc D. Doubleday			60,000/48,000	141
Jay Kleiman, M.D., M.P.A			0/50,000	
Robert L. McGinnis			44,000/48,000	100

⁽¹⁾ These figures are based on a fair market value for our common stock at May 28, 2004 of \$13.20 per share, the closing price of the common stock as reported by the Nasdaq National Market as of that date. May 28, 2004 represents the last trading day in our 2004 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 2004 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. These employment agreements provide for terms expiring in December 2004. The annual salaries payable during our 2004 fiscal year under the employment agreements with Dr. Gould and Mr. Kogut are \$318,938 and \$253,125, respectively. The employment agreements provide that the salaries of the respective executive officers may be increased but not decreased from the foregoing amounts at a rate to be agreed by us and the respective executive officers. The employment agreements also provide for cash bonus payments of \$330,750 and \$262,500, respectively, upon the approval by FDA of the commercial sale of PolyHeme(R) in the United States. Our board of directors may in its discretion decide to award the respective executive officers additional cash bonuses from time to time during the term of their respective employment agreements. No bonuses were paid to Dr. Gould or Mr. Kogut during our 2004 fiscal year. Restricted stock grants of 15,000 and 7,500 shares were made to Dr. Gould and Mr. Kogut, respectively, during our 2004 fiscal year. The employment

agreements also permit the executive officers to participate in all other employee benefit plans and programs we make available generally to our employees.

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 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.

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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.

The employment agreements also provide that if the executive officer's employment terminates at any time after December 31, 2004 for any reason other than death, disability or termination for cause and an employment offer by us is not outstanding as of the date of the termination of employment, then we are obligated to pay his full base salary, determined as of December 31, 2004, until December 31, 2006. If the executive officer's employment terminates at any time after December 31, 2004 for any reason other than death, disability or for cause and an employment offer by us is outstanding as of the date of termination of employment, then we are obligated to pay his full base salary, determined as of December 31, 2004, until December 31, 2005.

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 five 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, 2004, the end of our last completed fiscal year.

PLAN CATEGORY	NUMBER OF SHARES TO BE ISSUED UPON EXERCISE OF OUTSTANDING STOCK OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE OF OUTSTANDING STOCK OPTIONS	NUMBER C REMAINING A FUTURE ISS EQUITY COMPE
Equity compensation plans approved by stockholders Equity compensation plans not approved by	261,500	7.15	450
stockholders	942,000	9.06	265
Total	1,203,500	8.64	

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.

Our Restated Nonqualified Stock Option Plan lapsed on September 30, 1996. Following termination of this plan, all options outstanding prior to plan termination continue to be exercisable in accordance with their

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terms. As of May 31, 2004, options to purchase a total of 6,000 shares of common stock at a price of \$6.38 per share were outstanding under this plan. These options expire in 2004, ten years after the date of grant.

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 May 31, 2004, options to purchase a total of 425,500 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, 2004, options to purchase a total of 365,500 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

⁽¹⁾ We do not plan to grant any additional options under our stock option plans other than the Northfield Laboratories Inc. 2003 Equity Compensation Plan and the New Employee Stock Option Plan.

newly-hired employees. As of May 31, 2004, options to purchase a total of 85,000 shares common stock at prices between \$3.62 and \$7.53 per share were outstanding under the new employee plan. These options expire in 2013, 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, 2004, 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 2012.

The Northfield Laboratories Inc. 2003 Equity Compensation Plan was adopted by our board of directors on July 15, 2003 and approved by our stockholders on September 17, 2003. The 2003 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, 2004, restricted stock awards covering a total of 25,500 shares of common stock were outstanding under this plan. As of May 31, 2004, options to purchase a total of 261,500 shares of common stock at prices between \$5.94 and \$15.15 per share were outstanding under this plan. These options expire between 2013 and 2014.

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, 2004, 2003 and 2002 were \$169,758, \$145,307 and \$157,294, 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, 2004, our officers, directors and greater than 10% beneficial owners complied during our last fiscal year with all applicable Section 16(a) filing requirements.

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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.

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 250,000 stock options and made restricted stock grants covering 24,000 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 two of our named executive officers during our last completed fiscal year totaling \$50,000. 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 2004 fiscal year, our Chief Executive Officer, Steven A. Gould, M.D., received \$318,938 in base salary, a grant of 100,000 stock options and a restricted stock grant covering 15,000 shares of our common stock. Dr. Gould did not receive a cash bonus during our 2004 fiscal year. The amount and composition of Dr. Gould's compensation during our 2004 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, 2004 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, 1999 through May 31, 2004 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, 1999 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, 2004, 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	
	& FOREIGN	NORTHFIELD LABORATORIES,
May 28, 1999	100.0	100.0
May 31, 2000	184.7	92.2
May 31, 2001	196.4	137.7
May 31, 2002	134.8	34.2
May 30, 2003	160.3	53.4
May 28, 2004	181.4	109.0

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, 2004, for (i) each of our current executive officers named under "Management -- Executive Officers," (ii) each of our current directors, (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 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	669,700(2)	3.1%
Jack J. Kogut	183,810(3)	*
Marc D. Doubleday	63,500(4)	*
Eva C. Essig, Ph.D	6,250(5)	*
Jay H. Kleiman, M.D., M.P.A	12,500(6)	*
Robert L. McGinnis	49,500(7)	*
Sophia H. Twaddell	6,000(8)	*
John F. Bierbaum	1,519,812_(9)	7.1%
Bruce S. Chelberg	22,467(10)	*
Paul M. Ness, M.D	17,467_(11)	*
Jack Olshansky	55,484_(12)	*
David A. Savner	39,467_(13)	*
PepsiAmericas, Inc	1,502,345(14)	7.0%
60 South Sixth Street		
Suite 3880		
Minneapolis, Minnesota 55402		
SF Capital Partners Ltd	1,571,915(15)	7.3%
3600 South Lake Drive		
St. Francis, Wisconsin 53235		
All current directors and executive officers as a group (12		
persons)	1,143,612	5.2%

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- (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 126,250 shares of common stock which Dr. Gould is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Also includes 484,630 shares held in a personal trust and 43,820 shares held in a family trust. Does not include 178,750 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (3) Includes 96,500 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 90,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.

^{*} Less than one percent

- (4) Includes 59,500 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 42,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (5) Includes 6,250 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 18,750 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (6) Includes 12,500 shares of common stock which Dr. Kleiman is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days. Does not include 37,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (7) Includes 49,500 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 42,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (8) Includes 2,500 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 32,500 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (9) Includes 1,502,345 shares of common stock held by PepsiAmericas, Inc., also, includes 15,000 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 5,000 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days. Under the rules and regulations of the Securities and Exchange Commission, Mr. Bierbaum may be deemed a beneficial owner of the stock held by PepsiAmericas, Inc. Mr. Bierbaum disclaims beneficial ownership of the 1,502,345 shares of stock held by PepsiAmericas, Inc.
- (10) Includes 20,000 shares of common stock which Mr. Chelberg is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days.
- (11) Includes 15,000 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 5,000 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (12) Includes 45,000 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 5,000 shares acquirable pursuant to stock options not currently exercisable or exercisable within 60 days.
- (13) Includes 35,000 shares of common stock which Mr. Savner is entitled to acquire pursuant to stock options currently exercisable or exercisable within 60 days.
- (14) Based on the information reported in the Schedule 13G filed with the Securities and Exchange Commission by PepsiAmericas, Inc.
- (15) Based on the information reported in the Schedule 13G filed with the Securities and Exchange Commission by SF Capital Partners Ltd.

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, 2005 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 2003 and 2004 fiscal years, the following fees were billed to us by $\ensuremath{\mathtt{KPMG}}\xspace$:

	2003	2004
Audit Fees	\$74 , 000	\$ 79 , 000
Audit Related Fees	4,500	106,100
Tax Fees	17,000	17,525
All Other Fees		

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 Web site as described above under "Corporate Governance and Web Site Information." All of the services provided to us by our auditors during our 2003 and 2004 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 2006 fiscal year, rather than the 2005 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 2005.

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 18, 2005, 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 2005 annual meeting of stockholders will be held on or about September 20, 2005. Therefore, the deadline under our bylaws for timely submission of director nominations and stockholder proposals for consideration at our 2005 annual meeting is currently expected to be July 22, 2005. Stockholder nominations for director are also required under our bylaws to include certain information regarding the director nominee and the stockholder making the nomination.

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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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CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS OF NORTHFIELD LABORATORIES INC.

PURPOSES

The primary purposes of the Audit Committee (the "Committee") of the Board of Directors of Northfield Laboratories Inc. (the "Company") are to oversee on behalf of the Board of Directors:

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

The Committee also has the purpose of preparing the audit committee report that the rules of the Securities and Exchange Commission (the "SEC") require the Company to include in its annual proxy statement.

The Committee's function is one of oversight only and does not relieve management of its responsibilities for preparing financial statements that accurately and fairly present the Company's financial results and condition, nor the Company's independent auditors of their responsibilities relating to the audit or review of financial statements. Members of the Committee will not be deemed to have assumed any fiduciary or other duties greater than the other members of the Board of Directors.

ORGANIZATION

Number of Members

The Committee must consist of at least three directors. The Board of Directors may designate a Committee member as the chairperson of the Committee. If the Board of Directors does not do so, the Committee members will appoint a Committee member as chairperson by a majority vote of the Committee members.

Independence

All Committee members must have been determined by the Board of Directors to be independent, as defined and to the extent required in the applicable SEC rules and listing standards of the Nasdaq Stock Market, Inc., as they may be amended from time to time (the "listing standards"), for purposes of audit committee membership.

Financial Literacy

Each Committee member must be financially literate upon appointment to the Committee, as determined by the Board of Directors in accordance with the listing standards. At all times, there should be at least one Committee member who, as determined by the Board of Directors, meets any requirement in the listing standards for finance, accounting or comparable experience or background. The Board of Directors will also determine whether any member s of the Committee possess the requisite accounting or financial management experience and expertise to qualify as an "audit committee financial expert," as defined by the rules of the SEC, and the Company will make any disclosures required under the rules of the SEC with respect to such determination.

Appointment

Subject to any requirements of the listing standards, the Board of Directors may appoint and remove Committee members in accordance with the Company's Bylaws. Committee members will serve for such

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terms as the Board of Directors may fix, and in any case at the will of the Board of Directors, whether or not a specific term is fixed.

INDEPENDENT AUDITORS AND THEIR SERVICES

Overall Authority

The Committee has the sole authority and direct responsibility for the appointment, compensation, retention, termination, evaluation and oversight of the work of the independent auditors engaged by the Company for the purpose of preparing or issuing an audit report or related work or performing other audit, review or attest services for the Company. The Company's independent auditors report directly to the Committee. The Committee's authority includes resolution of disagreements between the Company's management and independent auditors regarding financial reporting and the receipt of communications from the independent auditors as may be required under professional standards applicable to the independent auditors.

Terms of Audit and Non-Audit Engagements

The Committee must pre-approve all audit, review, attest and permissible non-audit services to be provided to the Company by its independent auditors. The Committee may establish pre-approval policies and procedures in compliance with applicable SEC rules.

Annual Quality Control Report and Review

The Committee must obtain and review, at least annually, a report by the Company's independent auditors describing the firm's internal quality-control procedures. In addition, the Committee's annual review of its independent auditors' qualifications must also include the review and evaluation of the lead partner of the independent auditors for the Company's account, and evaluation of such other matters as the Committee may consider relevant to the engagement of the independent auditors, including views of the Company's management and internal finance employees, and whether the lead partner or auditing firm itself should be rotated.

Policy on Hiring Employees of the Auditors

The Committee may from time to time establish hiring policies that will govern the Company's hiring of employees or former employees of the Company's independent auditors, taking into account possible pressures on the auditors' personnel who might seek a position with the Company, and report these policies to the Board of Directors.

ANNUAL FINANCIAL REPORTING

As often and to the extent the Committee deems necessary or appropriate, but at least annually in connection with the audit of each fiscal year's financial statements, the Committee will:

Discuss Financial Statements and Internal Control Reports with Management

Review and discuss with appropriate members of management:

- the Company's audited financial statements;
- related accounting and auditing principles and practices; and
- management's assessment of internal control over financial reporting and the related reports on internal control over financial reporting to be included in the Company's annual report on Form 10-K (as and when these reports are required under SEC rules).

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Critical Accounting Policy Report

Review and discuss with the Company's independent auditors the report or update required pursuant to applicable SEC rules concerning:

- all critical accounting policies and practices to be used;
- all alternative treatments within generally accepted accounting principles for policies and practices relating to material items that have been discussed with Company management, including ramifications of the use of such alternative disclosures and treatments and the treatment preferred by the independent auditors; and
- other material written communications between the independent auditors and Company management, such as any management letter or schedule of unadjusted differences.

SAS 61 Review

Discuss with the Company's independent auditors the matters required to be discussed by Statement on Auditing Standards No. 61, including such matters as:

- the quality and acceptability of the accounting principles applied in the Company's financial statements;
- new or changed accounting policies, the effect of regulatory and accounting initiatives, and significant estimates, judgments, uncertainties or unusual transactions;
- the selection, application and effects of critical accounting policies and estimates applied by the Company;
- issues raised by any "management" or "internal control" letter from the Company's independent auditors, problems or difficulties encountered in the audit (including any restrictions on the scope of the work or on access to requested information) and management's response to such problems or difficulties, significant disagreements with management, or other significant aspects of the audit; and
- any off-balance sheet transactions, and relationships with any unconsolidated entities or any other persons, which may have a material current or future effect on the financial condition or results of the Company and are required to be reported under SEC rules.

MD&A

Review with appropriate members of the Company's management and independent auditors the intended disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" to be included in the Company's annual report on Form 10-K.

SB 1 Disclosure

Receive from the Company's independent auditors a formal written statement of all relationships between the auditors and the Company consistent with Independence Standards Board Standard No. 1.

Auditor Independence

Actively discuss with the Company's independent auditors any disclosed relationships or services that may impact their objectivity and independence, and take any other appropriate action to oversee their independence.

Recommend Filing of Audited Financial Statements

Recommend whether the Company's annual report on Form 10-K to be filed with the SEC should include the Company's audited financial statements.

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QUARTERLY FINANCIAL REPORTING

The Committee's quarterly review will normally include:

Quarterly Review

Review and discuss the quarterly financial statements of the Company and the results of its independent auditors' review of these financial statements with appropriate members of the Company's management and independent auditors.

Discussion of Significant Matters with Management

Review and discuss with the Company's management and, if appropriate, independent auditors, significant matters relating to:

- the quality and acceptability of the accounting principles applied in the financial statements;
- new or changed accounting policies, and significant estimates, judgments, uncertainties or unusual transactions;
- the selection, application and effects of critical accounting policies and estimates applied by the Company; and
- any off-balance sheet transactions and relationships with any unconsolidated entities or any other persons that may have a material current or future effect on the financial condition or results of the Company and are required to be reported under SEC rules.

MD&A

Review and discuss the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" to be included in the Company's quarterly report on Form 10-Q with appropriate members of the Company's management and independent auditors.

OTHER FUNCTIONS

Annual Review of this Charter

The Committee will review and assess the adequacy of this charter annually and recommend any proposed changes to the Board of Directors.

Earnings Releases and Other Financial Guidance

The Committee will discuss with management earnings press releases and other published financial information or guidance provided to analysts and rating agencies. This may be conducted generally as to types of information and presentations, and need not include advance review of each release, other information or guidance.

Compliance

The Committee, to the extent it deems necessary or appropriate, will periodically review with management the Company's disclosure controls and procedures, internal control over financial reporting and systems and procedures to promote compliance with laws.

Risk Assessment

The Committee will periodically:

- inquire of the Company's management and independent auditors about the Company's major financial risks or exposures;

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- discuss the steps management has taken to monitor and control such exposures; and
- discuss guidelines and policies with respect to risk assessment and risk

management.

Code of Business Conduct and Ethics

The Committee will conduct any activities relating to the Company's Code of Business Conduct and Ethics as may be delegated from time to time to the Committee by the Board of Directors.

Complaints and Anonymous Submissions

The Committee will establish and maintain procedures for:

- the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters; and
- the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

If the Committee or the Board of Directors so determines, the submission procedures may also include a method for interested parties to communicate directly with the Board's presiding director or with the non-management directors as a group.

Related Party Transactions

It is the Company's policy that the Company will not enter into transactions required to be disclosed under Item 404 of the SEC's Regulation S-K unless the Committee or another independent body of the Board of Directors first reviews and approves the transactions.

Internal Control Over Financial Reporting

The Committee will periodically discuss and review, as appropriate, with the Company's management and independent auditors:

- the design and effectiveness of the Company's internal control over financial reporting; and
- any significant deficiencies or material weaknesses in that internal control, any change that has materially affected or is reasonably likely to materially affect that internal control, and any fraud, whether or not material, that involves management or other employees who have a significant role in that internal control, that have been reported to the Committee.

Reports from Legal Counsel

The Committee will review and take appropriate action with respect to any reports to the Committee from legal counsel engaged by the Company concerning any material violation of securities law or breach of fiduciary duty or similar violation by the Company or any person acting on its behalf.

Other Reviews and Functions

The Committee, as it may consider appropriate, may consider and review with the Board of Directors, Company management, internal or outside legal counsel, the independent auditors or any other appropriate person any other topics relating to the purposes of the Committee that may come to the Committee's attention. The Committee may perform any other activities consistent with this charter, the Company's corporate governance documents and applicable listing standards, laws and regulations as the Committee or the Board of Directors

considers appropriate.

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MEETINGS, REPORTS AND RESOURCES

Meetings

The Committee will meet as often as it determines is necessary, but not less than quarterly. The Committee may also act by unanimous written consent in lieu of a meeting. The Committee will meet separately and periodically with the Company's management and independent auditors. In addition, the Committee may meet with any other persons, as it deems necessary.

Procedures

The Committee may establish its own procedures, including the formation and delegation of authority to subcommittees, in a manner not inconsistent with this charter, the Company's Bylaws, the listing standards or SEC rules. The chairperson or a majority of the Committee members may call meetings of the Committee. A majority of the authorized number of Committee members constitutes a quorum for the transaction of Committee business, and the vote of a majority of the Committee members present at a meeting at which a quorum is present will be the act of the Committee, unless in either case a greater number is required by this charter, the Company's Bylaws or the listing standards. The Committee will keep written minutes of its meetings and deliver copies of the minutes to the Company's corporate secretary for inclusion in the corporate records.

Reports

The Committee will timely prepare the audit committee report required to be included in the Company's annual meeting proxy statement, and report to the Board of Directors on the other matters relating to the Committee or its purposes, as required by the listing standards or SEC rules. The Committee will also report to the Board of Directors annually the overall results of its annual review of the independent auditors' qualifications, performance and independence and the annual review by the Committee of its own performance. The Committee also will report to the Board of Directors on the major items covered by the Committee at each Committee meeting, and provide additional reports to the Board of Directors as the Committee may determine to be appropriate, including review with the Board of Directors of any issues that arise from time to time with respect to the quality or integrity of the Company's financial statements, the Company's compliance with legal or regulatory requirements or the performance and independence of the independent auditors.

Committee Access and Investigations

The Committee is at all times authorized to have direct, independent and confidential access to the Company's independent auditors and to the Company's other directors, management and personnel to carry out the Committee's purposes. The Committee is authorized to conduct or authorize investigations into any matters relating to the purposes, duties or responsibilities of the Committee.

Committee Advisers and Funding

As the Committee deems necessary to carry out its duties, it is authorized to select, engage (including approval of the fees and terms of engagement), oversee, terminate and obtain advice and assistance from outside legal, accounting or other advisers or consultants. The Company will provide for appropriate funding, as determined by the Committee, for payment of:

- compensation to the Company's independent auditors for their audit and audit-related, review and attest services;
- compensation to any advisers engaged by the Committee; and
- ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

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No Assumption of Additional Duties; Reliance on Others

The members of the Committee, through their service on the Committee, will not be deemed to have assumed any fiduciary duties greater than those applicable to the other members of the Board of Directors. Nothing in this charter is intended to preclude or impair the protection provided in Section 141(e) of the Delaware General Corporation Law for good faith reliance by members of the Committee on reports or other information provided by others.

Effective: April 15, 2004

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NORTHFIELD LABORATORIES INC.

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DESIGNATION (IF ANY)

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MR A SAMPLE

ADD 2

ADD 3

ADD 4

ADD 5 ADD 6

Holder Account Number

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// Mark this box with an X if you
have made changes to your name or
address details above.

ANNUAL MEETING PROXY CARD

A ELECTION OF DIRECTORS PLEASE REFER TO THE REVERSE SIDE FOR TELEPHONE AND INT

^{1.} The Board of Directors recommends a vote FOR the listed nominees.

0 0					
	For	Withhold		For	Withhold
01 - Steven A. Gould, M.D.	/ /	/ /	04 - Paul M. Ness, M.D.	/ /	/ /
02 - John F. Bierbaum	/ /	/ /	05 - Jack Olshansky	/ /	/ /
03 - Bruce S. Chelberg	/ /	/ /	06 - David A. Savner	/ /	/ /
B PROPOSALS The Board of Directors recomme	nds a vo	ote FOR the	following proposals.		
			FOR AGAINST ABSTAIN		
2. To ratify the appointment o independent auditors of the for the Company's 2005 fisc	Company	y to serve	/ / / / / / /	Ιį	olan to attend
3. In their discretion, to act before the Annual Meeting a					
C AUTHORIZED SIGNATURES - SIGNSTRUCTIONS TO BE EXECUTED.	N HERE -	- THIS SECT	ION MUST BE COMPLETED FOR YO	JR	
NOTE: Sign exactly as your nam any other representative				adminis	strator, trust
Please sign in the box(s) belo	w to vai	lidate this	proxy.		
Signature 1 - Please keep sign	ature w	ithin the b	ox Signature 2 - Please kee	ep signa	ature within t
/ /			1 UP:		
001CD40001 00CY0A					
PROXY - NORTHFIELD LABORATORIE	 S INC.				

ANNUAL MEETING OF STOCKHOLDERS - SEPTEMBER 21, 2004 THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS.

The undersigned stockholder of Northfield Laboratories Inc. hereby appoints Jack J. Kogut and Carmen Wilcox, 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 Tuesday, September 21, 2004, at 10:00 A.M., local time, at 1560 Sherman Avenue, Evanston, Illinois 60201-4800, 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

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

(Continued and to be signed on reverse side.)

TELEPHONE AND INTERNET VOTING INSTRUCTIONS

YOU CAN VOTE BY TELEPHONE OR 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 vot

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

- Call toll free 1-866-601-0658 in the United States or Canada Go to the following web any time on a touch tone telephone. There is NO CHARGE to you WWW.COMPUTERSHARE.COM/U for you for the call.
- Follow the simple instructions provided by the recorded message. $\,\,$ Enter the information r
- and follow the simple i

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If you vote by 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 21, 2 THANK YOU FOR VOTING