

PROSPECTUS SUPPLEMENT NO. 1 DATED August 18, 2003  
TO PROSPECTUS DATED July 31, 2003

PRO-PHARMACEUTICALS, INC.

2,843,304 Shares of Common Stock  
\$.001 par value

We are using this prospectus supplement in connection with the offering by some of our existing stockholders of up to 2,843,304 shares of our common stock, as described on pages 26 to 29 of the prospectus dated July 31, 2003, to which this prospectus supplement is attached.

CHANGES IN SELLING SECURITY HOLDER INFORMATION

Name of Selling Security Holder	Beneficial Ownership of Selling Security Holder Prior to Offering			Beneficial Ownership of Shares After Offering	
	Number	Percent	Number of Shares offered hereby	Number	Percent
L.A. Bexten Inc.	39,000	*	14,000	25,000	*
Ruth Favazza	41,458	*	41,458	—	—
Louis Gherlone Jr.	7,000	*	7,000	—	—
Alvin Goldstein	27,271	*	25,771	1,500	*
Alvin Goldstein & Lina Polyachek JTEN	1,500	*	1,500	—	—
Alvin Goldstein & Lisa Saladini JTEN	2,500	*	2,500	—	—
Alvin Goldstein & Cheryl S. Young JTEN	1,500	*	1,500	—	—
Raymond A. Hanson	116,452	*	51,452	65,000	*
H. Preston & Carrie A. Hawkins	100,000	*	—	100,000	*
Carl R. Messing	13,337	*	10,337	3,000	*
Carol L. Ott	36,071	*	16,071	20,000	*
Leonard D. Pearlman	4,200	*	4,200	—	—
Julian F. Prince	25,000	*	—	25,000	*
Yigal Ran	50,186	*	5,186	45,000	*
Martha Skelton & Kenneth Skelton JTEN	1,500	*	1,500	—	—
Stephen E. Upton Trustee U/A dtd 7/8/71	32,000	*	7,000	25,000	*
Trustee for the Glenn E. White Trust dtd 6/8/95	55,658	*	20,658	35,000	*

You should read this prospectus supplement together with our prospectus dated July 31, 2003, which is to be delivered with this prospectus supplement.

The date of this Prospectus Supplement is August 18, 2003.

Recent Developments

On August 14, 2003, we filed the following quarterly report on Form 10-QSB for the three months ended June 30, 2003 with the U.S. Securities and Exchange Commission.

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

**FORM 10-QSB**

(Mark One)

Quarterly report under Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the quarterly period ended June 30, 2003

Transition report under Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 000-32877

**PRO-PHARMACEUTICALS, INC.**

(Exact name of small business issuer as specified in its charter)

Nevada  
(State or other jurisdiction of incorporation or organization)

04-3562325  
(I.R.S. Employer Identification No.)

189 Wells Avenue, Newton, Massachusetts 02459  
(Address of principal executive offices)

(617) 559-0033  
(Issuer's telephone number)

**APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY  
PROCEEDINGS DURING THE PRECEDING FIVE YEARS**

Check whether the issuer filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Exchange Act after the distribution of securities under a plan confirmed by a court. Yes  No

NOT APPLICABLE

**APPLICABLE ONLY TO CORPORATE ISSUERS**

State the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practicable date: The total number of shares of common stock, par value \$0.001 per share, outstanding as of June 30, 2003 was 20,343,571.

Transitional Small Business Disclosure Format (Check one): Yes  No

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## Part 1—Financial Information

## Item 1. Financial Statements

**PRO-PHARMACEUTICALS, INC.**  
**(A Development Stage Company)****CONDENSED BALANCE SHEETS (Unaudited)**

	June 30, 2003	December 31, 2002
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 1,791,058	\$ 1,921,233
Prepaid expenses and other current assets	93,619	72,733
<b>Total current assets</b>	<b>1,884,677</b>	<b>1,993,966</b>
PROPERTY AND EQUIPMENT, Net	181,354	177,160
INTANGIBLE ASSETS	114,669	85,090
DEPOSITS AND OTHER ASSETS	26,951	26,951
<b>Total assets</b>	<b>\$ 2,207,651</b>	<b>\$ 2,283,167</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 364,226	\$ 302,899
Accrued expenses	36,209	174,644
Offering costs payable	17,230	174,250
Convertible notes payable	—	15,000
<b>Total current liabilities</b>	<b>417,665</b>	<b>666,793</b>
<b>STOCKHOLDERS' EQUITY:</b>		
Common stock, \$0.001 par value; 100,000,000 shares authorized, 5,000,000 undesignated shares, 20,343,571 and 19,034,647 issued and outstanding at June 30, 2003 and December 31, 2002, respectively	20,343	19,034
Additional paid-in capital	11,600,983	9,635,531
Stock subscriptions receivable	—	(150,000)
Deferred compensation	(78,633)	(54,959)
Deficit accumulated during the development stage	(9,752,707)	(7,833,232)
<b>Total stockholders' equity</b>	<b>1,789,986</b>	<b>1,616,374</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 2,207,651</b>	<b>\$ 2,283,167</b>

See notes to condensed financial statements.

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**(A Development Stage Company)****CONDENSED STATEMENTS OF OPERATIONS (Unaudited)**

	Three Months Ended June 30,		Six Months Ended June 30,		Cumulative Period From Inception (July 10, 2000) To June 30, 2003
	2003	2002	2003	2002	
<b>OPERATING EXPENSES:</b>					
Research and development	\$ 407,944	\$ 451,630	\$ 801,823	\$ 760,712	\$ 3,278,557
General and administrative (a)	573,912	389,871	1,133,100	797,957	4,292,626
Total operating expenses	(981,856)	(841,501)	(1,934,923)	(1,558,669)	(7,571,183)
INTEREST INCOME	7,713	6,287	19,303	11,957	68,739
INTEREST EXPENSE	(465)	(107,196)	(3,855)	(347,991)	(2,250,263)
Net loss	\$ (974,608)	\$ (942,410)	\$ (1,919,475)	\$ (1,894,703)	\$ (9,752,707)
NET LOSS PER SHARE—BASIC AND DILUTED	\$ (0.05)	\$ (0.06)	\$ (0.10)	\$ (0.12)	
<b>WEIGHTED AVERAGE COMMON SHARES OUTSTANDING</b>					
Basic and diluted	20,343,571	15,665,749	20,168,378	15,595,079	
(a) The following summarizes the allocation of the stock-based compensation charge:					
General and administrative	\$ 37,100	\$ 24,654	\$ 84,061	\$ 40,726	

See notes to condensed financial statements.

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**PRO-PHARMACEUTICALS, INC.**  
**(A Development Stage Company)**

**CONDENSED STATEMENTS OF CASH FLOWS (Unaudited)**

	Six Months Ended June 30,		Cumulative Period From Inception (July 10, 2000) To June 30, 2003
	2003	2002	
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net loss	\$ (1,919,475)	\$ (1,894,703)	\$ (9,752,707)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	36,908	16,215	92,747
Amortization of debt discount on convertible notes	—	—	1,258,012
Amortization of deferred extension costs through interest expense	—	100,625	167,497
Expense related to issuance of warrants to purchase common stock	—	235,987	235,987
Writeoff of intangible assets	—	—	107,000
Debt conversion expense	—	—	503,019
Settlement of accrued interest through issuance of common stock	—	8,179	10,274
Stock based compensation expense	84,061	40,726	336,707
Changes in current assets and liabilities:			
Prepaid and other expenses	(20,886)	(7,752)	(90,491)
Deposits and other assets	—	—	(26,951)
Accounts payable	61,327	318,255	355,198
Accrued expenses	(25,179)	(70,566)	149,465
Net cash used in operating activities	(1,783,244)	(1,253,034)	(6,654,243)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchases of property and equipment	(39,360)	(80,695)	(272,359)
Increase in patents costs and other assets	(31,321)	(19,433)	(116,411)
Net cash used in investing activities	(70,681)	(100,128)	(388,770)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Net proceeds from issuance of common stock and warrants	—	—	2,229,750
Net proceeds from issuance of common stock	1,723,750	650,998	5,360,691
Net proceeds from issuance of convertible notes payable	—	—	1,320,602
Repayment of convertible notes payable	—	—	(86,000)
Proceeds from shareholder advances	—	—	9,028
Net cash provided by financing activities	1,723,750	650,998	8,834,071
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>(130,175)</b>	<b>(702,164)</b>	<b>1,791,058</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD</b>	<b>1,921,233</b>	<b>1,491,172</b>	<b>—</b>
<b>CASH AND CASH EQUIVALENTS, END OF PERIOD</b>	<b>\$ 1,791,058</b>	<b>\$ 789,008</b>	<b>\$ 1,791,058</b>

See notes to condensed financial statements.

**PRO-PHARMACEUTICALS, INC.**  
**(A Development Stage Company)**

**NOTES TO CONDENSED FINANCIAL STATEMENTS (Unaudited)**  
**June 30, 2003**

1. NATURE OF OPERATIONS, BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

Pro-Pharmaceuticals, Inc. (the "Company") was established in July 2000. The Company is in the development stage and is in the process of developing technology that is intended to reduce the toxicity and improve the efficacy of currently existing chemotherapy drugs by combining the drugs with its proprietary carbohydrate compounds.

The Company is devoting substantially all of its efforts toward product research and development, and raising capital.

- One of its product candidates began Phase I clinical trials in February 2003.
- During the quarter ended June 30, 2003, the Company raised net proceeds of approximately \$473,770 in capital through a private placement of securities which began in May 2003, as discussed in Note 3. Subsequent to the end of the quarter, the Company raised additional net proceeds of approximately \$4.22 million in connection with this private placement.

BASIS OF PRESENTATION

The Company is subject to a number of risks similar to those of other development stage companies, including dependence on key individuals, uncertainty of product development and generation of revenues, dependence on outside sources of capital, risks associated with clinical trials of products, dependence on third-party collaborators for research operations, need for regulatory approval of products, risks associated with protection of intellectual property, and competition with larger, better-capitalized companies.

The Company plans to raise additional capital through private placements or public offerings of equity securities in order to cover future budgets. Given the Company's recent attempts to raise additional capital and its available cash and cash equivalents as of June 30, 2003, the Company believes that it will be able to proceed with its current plan of operations and meet its obligations for all of 2003 and through at least the third quarter of 2004. If actual expenses exceed the budget, however, the Company will need to raise additional capital sooner in order to meet its cash needs. If the Company cannot raise the additional funds when needed, the Company would slow or halt its research and development expenditures until adequate funding became available. The Company's business structure is somewhat flexible because the Company outsources most of its research and development.

Pursuant to the rules and regulations of the Securities and Exchange Commission, the Company has prepared the condensed financial statements included herein. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted

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accounting principles have been condensed or omitted pursuant to such rules and regulations. The Company believes, however, that the disclosures are adequate to make the information presented not misleading. It is suggested that these condensed financial statements be read in conjunction with the financial statements and the notes thereto included in the Company's latest annual report on Form 10-KSB.

The condensed financial statements, in the opinion of management, include all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the Company's financial position and the results of operations. These results are not necessarily indicative of the results to be expected for the entire year.

### SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies followed by the Company in preparing its financial statements are set forth in Note 2 to the financial statements included in its report on Form 10-KSB for the year ended December 31, 2002. The Company has made no changes to these policies during this quarter.

*Reclassifications:* Certain prior period amounts have been reclassified to conform to the current period presentation.

*Stock-Based Compensation:* As allowed by Statement of Financial Accounting Standard ("SFAS") No. 123, "Accounting for Stock-Based Compensation," the Company has elected to account for stock-based compensation at intrinsic value with disclosure of the effects of fair value accounting on net loss and net loss per share on a pro forma basis. The Company accounts for awards issued to employees under the plan using the recognition and measurement principles of Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. No compensation expense has been recognized in connection with its stock option plans, as all options granted under the plan had an exercise price equal to or greater than the market value of the underlying common stock on the date of grant. The following table illustrates the effect on net loss and net loss per share had the Company adopted the fair value recognition provisions of SFAS No. 123:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2003	2002	2003	2002
Net loss, as reported	\$ (974,608)	\$ (942,410)	\$ (1,919,475)	\$ (1,894,703)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(84,663)	(9,883)	(124,760)	(9,883)
Pro forma net loss	\$ (1,059,271)	\$ (952,293)	(2,044,235)	(1,904,586)
Net loss per share:				
Basic and diluted – as reported	(0.05)	(0.05)	(0.10)	(0.12)
Basic and diluted – pro forma	(0.05)	(0.05)	(0.10)	(0.12)

The Company estimated the fair value on the date of grant using the Black-Scholes option pricing model. Key assumption used to apply this pricing model were a deemed fair market values of the Company's common stock ranging from \$2.89 to \$3.50 per share on the grant date, risk free interest rates ranging from 2.06% to 2.32%, a weighted average expected life of three years, and a dividend rate of 0.0%.

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### 2. NET LOSS PER SHARE

Basic and diluted net loss per share is presented in conformity with SFAS No. 128, "Earnings per Share," for all periods presented. In accordance with SFAS No. 128, basic and diluted net loss per common share was determined by dividing net loss applicable to common stockholders by the weighted-average common shares outstanding during the period, less shares subject to repurchase. Diluted weighted-average shares are the same as basic weighted-average shares since the inclusion of 1,900,501 and 1,852,423 shares at June 30, 2003 and December 31, 2002, respectively, issuable pursuant to the exercise of stock options and warrants and conversion of convertible debt would have been antidilutive.

### 3. STOCKHOLDERS' EQUITY

*May 2003 Private Placement*—In May 2003, the Company began a private placement of securities at \$2.00 per share of up to 2,500,000 shares of common stock, exempt from registration pursuant to Rule 506 of Regulation D under the Securities Act of 1933 in order to raise up to \$5,000,000 to cover its expenditures. Such shares, insofar as they are "restricted securities", were sold at a price approximately 25 percent below the market price of the shares of the Company's common stock that were trading at the time the private placement began. During the quarter ended June 30, 2003, the Company sold approximately 245,500 shares under this offering for gross proceeds of approximately \$491,000. As of June 30, 2003, the Company had not yet issued shares of common stock in connection with proceeds received and has accordingly classified the proceeds as additional paid-in capital. The Company continued to offer securities under this private placement through July 15, 2003 and received approximately \$4.3 million in incremental gross proceeds.

In consideration for services performed as part of the private placement, the Company has agreed to compensate a registered investment advisor, a finder registered under applicable law, and such finder's agents, for identifying qualified investors; and two registered broker dealers (collectively, the "Placement Group"). As of June 30, 2003, the Placement Group was entitled to receive \$17,230 in cash and 14,213 warrants to purchase common stock at \$5.40 per share, expiring on July 15, 2006. Subsequent to the end of the quarter, the Placement Group was entitled to receive approximately \$115,240 in cash and 95,400 warrants to purchase common stock at \$5.40 per share expiring on July 15, 2006.

### 4. STOCK OPTION PLANS

In March 2003, the Company entered into a contract with a board member and shareholder of the Company, pursuant to which such director would provide consulting services in connection with its business development and related financial services. The Company agreed to compensate the shareholder by granting options to purchase 24,000 shares of Common Stock, at an exercise price of \$3.50 per share, which vest at a rate of 2,000 shares of Common Stock per month through March 1, 2004. The options expire 10 years from the grant date. The options were initially valued at \$33,403, using the Black-Scholes option pricing model, based on a deemed fair value of the Company's common stock of \$2.59 per share, an assumed volatility of 95%, a risk-free interest rate of 1.75%, a weighed average expected life of three years, and a dividend rate of 0.0%.

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During 2002, a board member and stockholder of the Company provided consulting services to the Company. In April 2003, such individual agreed to receive compensation for such services in the form of 25,324 shares of common stock and 25,324 options at an exercise price of \$2.96 to purchase common stock of the Company. As of December 31, 2002, the Company recorded the deemed fair value of such compensation of approximately \$121,956 as an accrued liability. The common stock has been valued at \$75,972, based on the closing price of the publicly traded shares of common stock on the date of grant. The options were valued at \$45,984, using the Black-Scholes option pricing model, based on a deemed fair value of the Company's common stock of \$3.00 per share, an assumed volatility of 95%, a risk-free interest rate of 2.91%, a weighed average expected life of three years, and a dividend rate of 0.0%.

In May 2003, the Company granted a member of its Scientific Advisory Board non-qualified stock options to purchase 10,000 shares of Common Stock exercisable for five years at \$3.50 per share, the exercise rights to which vest with respect to 5,000 options as of May 8, 2003, and 5,000 options as of May 8, 2005. The options were valued at \$15,507, using the Black-Scholes option pricing model, based on a deemed fair value of the Company's common stock of \$2.80 per share, an assumed volatility of 95%, a risk-free interest rate of 1.75%, a weighed average expected life of three years, and a dividend rate of 0.0%.

Stock options granted to non-employees are accounted for in accordance with SFAS No. 123 and the Emerging Issues Task Force ("EITF") Abstract No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services," and the related interpretations, which generally requires the value of options to be periodically remeasured and charged to expense as they are earned over the performance period. The fair value of the options is determined using the Black-Scholes option pricing model. Compensation expense for non-employee options recorded in the accompanying financial statements was \$84,061 and \$40,726 for the six months ended June 30, 2003 and 2002, respectively, and \$37,100 and \$24,654 for the three months ended June 30, 2003 and 2002 respectively.

### 5. COMMITMENTS AND CONTINGENCIES

On May 14, 2003 an action titled Sheila Jayaraj v. Pro-Pharmaceuticals, Inc. and David Platt (Commonwealth of Massachusetts, Middlesex Superior Court, Case No. 03-2102) was instituted against the Company. A related complainant letter dated May 14, 2003 was filed with the Occupational Safety and Health Administration of the U.S. Department of Labor. The plaintiff, who was Vice President of Investor Relations and Corporate Strategy for approximately five months, asserts against the Company claims for wrongful discharge in violation of public policy and of employee protection provided for under the Sarbanes-Oxley Act of 2002. The plaintiff seeks monetary damages and full reinstatement of her position at Pro-Pharmaceuticals, Inc. Based on a preliminary investigation, the Company believes the claims are without merit, and accordingly intends to defend the allegations vigorously.

## **Item 2. Plan of Operation**

This quarterly report on Form 10-QSB contains, in addition to historical information, forward-looking statements. These statements can be identified by the use of forward-looking terminology such as “may,” “will,” “could,” “expect,” “anticipate,” “estimate,” “continue” or other similar words. These forward-looking statements are based on management’s current expectations and are subject to a number of factors and uncertainties, which could cause actual results to differ materially from those described in such statements. We caution investors that actual results or business conditions may differ materially from those projected or suggested in forward-looking statements as a result of various factors including, but not limited to, those described in the Risk Factors section in our Annual Report on Form 10-KSB for the year ended December 31, 2002 and our Registration Statement filed on Form SB-2 with the Securities and Exchange Commission on July 17, 2003, as amended on July 30, 2003. We cannot assure you that we have identified all the factors that create uncertainties. Readers should not place undue reliance on forward-looking statements. We undertake no obligation to publicly release the result of any revision of these forward-looking statements to reflect events or circumstances after the date they are made or to reflect the occurrence of unanticipated events.

### **Overview**

We are engaged in research and development of drug technologies to enable targeted delivery of chemotherapy drugs. We intend initially to combine our proprietary carbohydrate compounds with existing widely-used chemotherapies. We believe our technology will increase the body’s tolerance to these toxic drugs by targeting the delivery directly to cancerous cells. We also believe our approach of improving existing chemotherapy drugs by adding a targeting mechanism should also increase the efficacy of these drugs thereby, together with toxicity reduction, creating a preferable treatment to existing first line oncology regimens. Additionally, we believe that this drug development strategy will enable our company to gain patent protection on drugs we reformulate with our carbohydrate compounds.

The U.S. Food and Drug Administration (the “FDA”) has approved our first Investigational New Drug Application (“IND”) for Phase I human clinical trials relating to colorectal cancer. Additionally, the FDA also approved our amendment to broaden the scope of our IND to include all solid tumors. In February, 2003, we began clinical trials of our drug and are in the process of collecting results. Also, we are currently conducting pre-clinical animal experiments with additional IND candidates. We have not yet generated any operating revenues.

We were incorporated under Nevada law in January 2001. Shares of our common stock currently are quoted on the OTC Bulletin Board under the symbol “PROH”.

### **Research and Development**

Our drug development program is focused on novel drug delivery platforms to upgrade the efficacy and reduce the toxicity of some of the proven, commonly used anti-cancer drugs. We believe we can enhance the delivery of the chemotherapeutic drugs by exploiting liquid recognition of sugar-specific receptors found on cancer cells. Our studies indicate that a polysaccharide with a suitable chemical structure and charge in combination with a chemotherapy drug, will increase cellular membrane fluidity and permeability, thereby facilitating delivery to the affected cell.

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The first group of drugs selected to go through our “upgrade programs” are 5-Fluorouracil, Adriamycin<sup>®</sup>, Taxol<sup>®</sup>, Cytosan<sup>®</sup> and Cisplatin<sup>®</sup>. The two patent-pending, drug delivery platforms, which we have identified and trademarked, are as follows:

- DAVANAT<sup>™</sup>, a galactomannan derivative, is a formulation using oligomeric carbohydrates as the target vehicle for chemotherapeutic drugs.
- UNIVERSAL CARBOHYDRATE LINKAGE TECHNOLOGY<sup>™</sup>, or UCLT<sup>™</sup>, enhances the delivery of chemotherapeutic drugs by utilizing carbohydrate specific receptors found on cancer cells.

### DAVANAT<sup>™</sup>-1

DAVANAT<sup>™</sup> combined with 5-Fluorouracil (5-FU), referred to as DAVANAT<sup>™</sup>-1, is our first drug combination that has advanced to human clinical trials. DAVANAT<sup>™</sup> was selected using animal models as the most promising combination for 5-FU. In 2002, DAVANAT<sup>™</sup>-1 was submitted to the FDA and was approved as an investigational new drug (IND), which authorizes us to begin human clinical trials. On February 10, 2003 we began Phase I clinical trials in humans. See “Phase I Clinical Trials” below.

### Toxicity Studies

Our initial toxicity studies in smaller animals, conducted in early 2001, were performed to test the potential reduction of toxicity of anticancer drugs in combination with certain of our polysaccharide compounds. The results of one study demonstrated that one of our polysaccharide compounds, DAVANAT<sup>™</sup>, might significantly decrease the toxicity of 5-FU. A second, similar study was performed to test a potential reduction of toxicity of Adriamycin<sup>®</sup> in combination with each of two selected polysaccharide compounds. The results indicated that DAVANAT<sup>™</sup> might decrease the toxicity of Adriamycin<sup>®</sup>. The fact that two different cancer drugs, with chemically unrelated structures, showed a marked reduction of their toxicity in combination with DAVANAT<sup>™</sup> indicates that there might be some fundamental underlying biological reasons related to this polysaccharide, rather than to the drugs, for the reduction in toxicity.

In subsequent pre-clinical experiments conducted in 2001 and 2002, we studied on larger animals the toxicity reduction of DAVANAT<sup>™</sup>-1, a DAVANAT<sup>™</sup> combination with 5-FU, which had demonstrated toxicity reduction in the prior studies. These experiments were performed in accordance with FDA guidelines and recommendations on rats (acute and long-term toxicity study) and dogs (acute and long-term toxicity study) measuring the effect of the DAVANAT<sup>™</sup>/5-FU combination on body weight, feed consumption, blood structure and survival of these animals. Preliminary results indicate that the DAVANAT<sup>™</sup>/5-FU combination decreased toxicity, resulting in lower animal mortality and decreased loss of blood structure components in comparison to the results in animals that were administered 5-FU/leucovorin alone. These studies were presented to the FDA as part of our IND submission (detail below). We conducted additional toxicity studies on rats using escalating dosages of

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DAVANAT™ and submitted these results to the FDA in an amendment to our IND in support of our Phase I clinical trials. The results of these additional toxicity studies were such that the FDA approved our commencement of Phase I clinical trials.

### Efficacy Studies

We undertook independent studies at Southern Research Institute and Charles River Laboratories to test a potential change in the therapeutic efficacy of the DAVANAT™/5-FU combination that had decreased toxicity of the drug in healthy animals. Results of the studies demonstrated that DAVANAT™ might also increase the efficacy of 5-FU when administered into cancer-carrying animals. The studies, conducted with two different human colon tumors implanted into the test animals, demonstrated a decrease in tumor size following administration of 5-FU/leucovorin alone, as well as a significant decrease with the administration of the DAVANAT™/5-FU combination.

Two of our efficacy studies were conducted to evaluate the compatibility of DAVANAT™ with leucovorin, which is commonly used in cancer treatment with 5-FU. The studies showed that DAVANAT™ and leucovorin do not interfere with each other when administered following standard procedure, and that the DAVANAT™/5-FU combination is superior, compared to 5-FU/leucovorin when both are administered in tumor-bearing animals. Leucovorin is a folinic acid derivative, which may enhance both the therapeutic and toxic effect of 5-FU in cancer therapy. In these studies, the growth of the tumor was decreased significantly by using a DAVANAT™/5-FU combination compared to a 5-FU/leucovorin combination.

We also conducted a study that involved injecting radiolabeled DAVANAT™ (with and without 5-FU) into tumor-free and tumor-bearing animals. The study provided experimental data with respect to DAVANAT™ distribution in organs and tissues (liver, kidney, lungs, plasma, and tumor) and the capacity of such organs and tissue to clear DAVANAT™ after various time periods. The study suggested that DAVANAT™ may protect the liver from the toxic effect of 5-FU yet increase the amount, and hence the therapeutic effect, of 5-FU in the tumor. In other words, we have indications that DAVANAT™ may decrease toxicity and increase efficacy of 5-FU.

In addition to the DAVANAT™/5-FU combination, we are also conducting pre-clinical studies for doxorubicin and paclitaxel, both in combination with DAVANAT™ and other polysaccharide compounds.

Although the foregoing studies are encouraging, the results achieved in preclinical studies with animals are often not duplicated in human patients. Please see “Risk Factors—Our product candidates will be based on novel technologies” in our Annual Report Form 10-KSB for the year ended December 31, 2002 and “Risk Factors—We Have Only Recently Began Clinical Trials And Results Are Uncertain” in our Registration Statement, as amended, filed on Form SB-2 on July 17, 2003.

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### Phase I Clinical Trials

We submitted an IND to the FDA on May 26, 2002 based on the pre-clinical data obtained from our 5-FU studies. The FDA accepted the IND as of June 26, 2002, which authorized us to begin Phase I clinical trials with humans. We filed an amendment to the IND on November 27, 2002 in order to incorporate new toxicology data and to enable us to undertake dose escalation in our Phase I trials. In response to the amendment, the FDA approved the dose escalation schema which would allow assessment in clinical trials of DAVANAT™ doses anticipated to be in the range of those for which the pre-clinical studies suggested efficacy.

In Phase I we are evaluating the ability of cancer patients to tolerate increasing doses of DAVANAT™ while receiving a stable dose of 5-FU for treatment of a variety of solid tumors which have not responded to accepted therapies. The Phase I study has two primary objectives: (1) to determine the maximum dose of DAVANAT™ that can be tolerated when administered with a stable dose of 5-FU, and (2) to define the dose-limiting toxicities of DAVANAT™ in combination with 5-FU. We expect that up to 40 male and female patients suffering from advanced solid malignancies, who failed the accepted chemotherapeutic, radiation, and/or surgical treatments, will participate in the study.

We have identified four clinical sites and lead investigators in which to undertake our Phase I trials: The Ochsner Cancer Institute, located in New Orleans, Louisiana; Norris Cotton Cancer Center at Dartmouth-Hitchcock Medical Center, located in Lebanon, New Hampshire; Florida Oncology Associates, located in Jacksonville, Florida; and The University of Michigan Comprehensive Cancer Center, located in Ann Arbor, Michigan.

We have also engaged a professional consultant, Dr. Marilyn Pike, who is affiliated with Harvard Medical School and Massachusetts General Hospital, to serve as Medical Director of our clinical trials.

The pharmaceutical company with which we contracted to produce DAVANAT™, a certified GMP facility, has manufactured sufficient quantities for the doses that will be needed for the human clinical trials.

We have engaged PRA International Inc. to serve as our independent Contract Research Organization (CRO) to manage and implement the clinical trials on our behalf. Additionally, Medidata Solutions Inc. has constructed for us an on-line electronic data capture (EDC) method to collect and aggregate our clinical trial data. We expect that EDC will better enable us to manage clinical trial data and increase the speed at which such data is reported and compiled. We believe this may accelerate our commencement of Phase II clinical trials.

### Other Carbohydrate-Cancer Drug Formulations

We have chemically synthesized four novel products that are carbohydrate derivatives of Adriamycin®, and have conducted preclinical studies in mice of both toxicity (effects on healthy animals) and efficacy (on cancer-carrying animals). Preliminary results of these experiments indicate that all four of the synthesized carbohydrate-Adriamycin® compounds, and particularly one, named Galactomycin™, are significantly less toxic compared with the original Adriamycin®, and demonstrate

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therapeutic efficacy as well. In the case of Galactomycin™, the preliminary results indicated a therapeutic index improvement over the parent Adriamycin®. These studies were conducted at the Academy of Medical Sciences, Moscow, Russia. We have started the scale-up manufacturing for Galactomycin™ and are currently conducting pre-clinical efficacy studies in tumor-bearing animals.

Although the foregoing studies are encouraging, the results achieved in preclinical studies with animals are often not duplicated in human patients. Please see “Risk Factors—Our product candidates will be based on novel technologies” in our Annual Report on Form 10-KSB for the year ended December 31, 2002 and “Risk Factors—Our product candidates will be based on novel unproven technologies” in our Registration Statement, as amended, initially filed on Form SB-2 on July 17, 2003.

### **Patents and Proprietary Rights**

We have one patent application that has received a Notice of Allowance from the U.S. Patent and Trademark Office. We also have four non-provisional utility patent applications, and two provisional patent applications, pending in the U.S. Patent Office. The patent applications cover methods and compositions for reducing side effects in chemotherapeutic formulations, and improving efficacy and reducing toxicity of chemotherapeutic agents. The patent that received the Notice of Allowance is entitled “Methods and Compositions for Reducing Side Effects in Chemotherapeutic Treatments” and covers improved targeting of Doxorubicin using Galactomycin™. In addition, international patent applications corresponding to two of our U.S. applications have been filed under the Patent Cooperation Treaty and we have an application pending before the European Patent Office.

We filed with the U.S. Patent and Trademark Office applications to register several trademarks and service marks. For more detailed information on our trademarks/servicemarks, see our Annual Report on Form 10-KSB for the year ended December 31, 2002 and we have an application pending before the European Patent Office.

### **Plan of Operation**

As discussed in our 2002 Annual Report on Form 10-KSB, we are a development-stage company and have not generated any revenues to date. We have raised funds primarily through private placements of convertible debt and shares of common stock, and a public offering of shares of common stock.

As of June 30, 2003, we had \$1,791,058 in cash and working capital of \$1,467,012. Our budgeted expenditures for the next twelve months total of approximately \$3,700,000, including research and development expenditures of approximately \$2,200,000 and general and administrative expenditures of approximately \$1,500,000.

In May 2003, we began a private placement at \$2.00 per share of up to 2,500,000 shares of common stock, exempt from registration pursuant to Rule 506 of Regulation D under the Securities Act 1933, which shares insofar as they were “restricted securities” were sold at a price approximately 25 percent below the market price of the shares of our common stock that were trading at the time the private placement began. We terminated this private placement on July 15, 2003. In connection with the private placement, we received gross proceeds of approximately \$4,800,000, of which \$491,000 was received as of June 30, 2003. Earlier this year, we raised a total of approximately \$4,311,000 in a private placement of common stock begun in September 2002 and completed in January 2003. We are dedicating all proceeds of these private placements to research and development, including expenses of Phase I/II clinical trials of our drug candidate for which the FDA approved our investigational new drug application, and general and administrative expenses.

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We plan to raise additional capital through private placements or public offerings of equity securities in order to cover our future budgets. Given our recent attempts to raise additional capital and our available cash and cash equivalents as of June 30, 2003, we believe we will be able to proceed with our current plan of operations and meet our obligations for all of 2003 and through at least the third quarter of 2004. If actual expenses exceed our budget, however, we will need to raise additional capital sooner in order to meet our cash needs. If we cannot raise the additional funds when needed, we would slow or halt our research and development expenditures until adequate funding became available. Our business structure is somewhat flexible because we outsource most of our research and development.

We have one product candidate in Phase I clinical trials. During the next twelve months, we anticipate that our research and development activities will include continuation of this Phase I clinical trial, as discussed above under “Phase I Clinical Trials,” as well as continuing pre-clinical animal experiments to study toxicity and efficacy of 5-FU and other cancer chemotherapies both in combination with our polysaccharide compounds and, in the case of Adriamycin<sup>®</sup>, as chemically modified with sugar residues via “linkers” of a certain chemical structure that are our proprietary technology.

We do not anticipate building in-house research or development facilities, or hiring staff to conduct those activities. Consequently, we do not expect to make any purchases or sales of plant or significant equipment during the next twelve months. We currently have seven employees, all full-time. We do not expect a substantial increase to our employee headcount.

### **Item 3. Controls and Procedures**

(a) Evaluation of disclosure controls and procedures. An evaluation was performed under the supervision and with the participation of the Corporation’s management, including the principal executive officer and principal financial officer, of the effectiveness of the design and operation of the Corporation’s disclosure controls and procedures pursuant to Rule 13a-15(e) of the Securities Exchange Act of 1934 (the “Exchange Act”) as of June 30, 2003. Based upon that evaluation, the Corporation’s principal executive officer and principal financial officer concluded that the Corporation’s disclosure controls and procedures are effective to ensure that information required to be disclosed by the Corporation in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

(b) Changes in internal controls. There has been no change in the Corporation’s internal control over financial reporting during the quarterly period ended June 30, 2003, that has materially affected, or is reasonably likely to materially affect, the Corporation’s internal control over financial reporting.

**PART II – OTHER INFORMATION**

**Item 1. Legal Proceedings**

On May 14, 2003 an action titled Sheila Jayaraj v. Pro-Pharmaceuticals, Inc. and David Platt (Commonwealth of Massachusetts, Middlesex Superior Court, Case No. 03-2102) was instituted against us. A related complainant letter dated May 14, 2003 was filed with the Occupational Safety and Health Administration of the U.S. Department of Labor. The plaintiff, who was Vice President of Investor Relations and Corporate Strategy for approximately five months, asserts against us claims for wrongful discharge in violation of public policy and of employee protection provided for under the Sarbanes-Oxley Act of 2002. The plaintiff seeks monetary damages and full reinstatement of her position at Pro-Pharmaceuticals, Inc. Based on a preliminary investigation we have conducted, we believe the claims are without merit, and accordingly we intend to defend the allegations vigorously.

**Item 2. Changes in Securities**

In May 2003, we began a private placement of securities at \$2.00 per share of up to 2,500,000 shares of common stock, exempt from registration pursuant to Rule 506 of Regulation D under the Securities Act of 1933 in order to raise up to \$5,000,000 to cover our expenditures. Such shares, insofar as they are “restricted securities”, were sold at a price approximately 25 percent below the market price of the shares of our common stock that were trading at the time the private placement began. Purchasers under the private placement must qualify as “accredited investors” as such term is defined in Regulation D. During the quarter ended June 30, 2003, we had sold approximately 245,500 shares under this offering for gross proceeds of approximately \$491,000. We terminated this private placement on July 15, 2003 and as of August 4, 2003 had received gross proceeds of approximately \$4,800,000.

**Item 3. Defaults Upon Senior Securities**

None

**Item 4. Submission of Matters to a Vote of Security Holders**

The following matters were submitted to a vote of stockholders at our Annual Meeting of Stockholders, held on May 28, 2003, with the vote tabulations as indicated below:

Stockholders who voted elected eight directors to one-year terms. The vote tabulation for individual directors was:

<u>Director</u>	<u>Shares For</u>	<u>Shares Withheld</u>
David Platt, Ph.D.	15,299,513	0
James Czirr	15,299,513	0

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Burton C. Firtel	15,299,513	0
Dale H. Conaway, D.V.M.	15,299,513	0
David H. Smith	15,299,513	0
Edgar Ben-Josef, M.D.	15,299,513	0
Mildred Christian, Ph.D.	15,299,513	0
Steven Prelack	15,299,513	0

Stockholders who voted also approved the ratification of the appointment of Deloitte & Touche LLP, as Pro-Pharmaceuticals' independent public accountants for the fiscal year ending December 31, 2003, by a vote of 15,239,265 for and 60,348 against.

There were no abstentions or broker non-votes.

### **Item 5. Other Information**

During the quarter ended June 30, 2003, the Compensation Committee of the Board of Directors previously comprised of James Czirr, Burton Firtel and, until March 20, 2003, Peter Hauser, was replaced with a new group of directors to enhance the independence of this committee. As of June 2003, the Compensation Committee is comprised of Mildred Christian, Ph.D. and Edgar Ben-Josef, M.D. The Compensation Committee is responsible for reviewing matters pertaining to the compensation of employees of, and consultants to, Pro-Pharmaceuticals, fixing the cash compensation of officers of Pro-Pharmaceuticals and administering, and making grants and awards to directors, officers, employees, consultants and advisors under Pro-Pharmaceuticals' 2001 Stock Incentive Plan.

The Audit Committee of the Board of Directors, comprised of Dale Conaway, Burton Firtel and, until March 20, 2003, Peter Hauser was modified. In March 2003, Peter Hauser resigned from the Board of Directors for personal reasons. In April 2003, Steven Prelack joined our Board of Directors and agreed to replace Mr. Firtel on the Audit Committee. Mr. Prelack qualifies as an Audit Committee financial expert under regulations recently adopted by the SEC in connection with future required disclosures, and he is independent of management, also as determined in accordance with the new regulations. The Audit Committee is responsible for oversight of the quality and integrity of the accounting, auditing and reporting practices of Pro-Pharmaceuticals.

### **Item 6. Exhibits and Reports on Form 8-K**

#### (a) Exhibits

The Exhibits filed as part of this Form 10-QSB are listed on the Exhibit Index immediately preceding such Exhibits, which Exhibit Index is incorporated herein by reference.

#### (b) Reports on Form 8-K

We did not file any Current Reports on Form 8-K during the quarter ended June 30, 2003.



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Exhibit Index

<b>Exhibit Number</b>	<b>Description of Document</b>	
3.1	Articles of Incorporation of the Registrant, dated January 26, 2001	*
3.2	Amended and Restated By-laws of the Registrant	**
10.1	Assignment and Assumption Agreement, dated April 23, 2001, by and between Developed Technology Resource, Inc. and DTR-Med Pharma Corp.	*
10.2	Stock Exchange Agreement, dated April 25, 2001, by and among Developed Technology Resource, Inc., DTR-Med Pharma Corp., Pro-Pharmaceuticals, Inc. (Massachusetts) and the Shareholders (as defined therein)	*
10.3	Pro-Pharmaceuticals, Inc. 2001 Stock Incentive Plan	**
10.4	Consulting Agreement, dated as of March 14, 2002, as amended November 14, 2002, by and between Pro-Pharmaceuticals, Inc. and Burton Firtel	****
10.5	Consulting Agreement, dated as of January 16, 2003, by and between Pro-Pharmaceuticals, Inc. and David H. Smith	****
10.6	Employment Agreement, dated effective as of April 1, 2003, by and between Pro-Pharmaceuticals, Inc. and David A. Christopher	
16.1	Letter from Scillia Dowling & Natarelli LLC to the Commission, dated February 25, 2002, concerning change in certifying accountant	***
16.2	Letter from Scillia Dowling & Natarelli LLC to the Commission, dated March 7, 2002, concerning change in certifying accountant	***
21	Subsidiaries of the Registrant	None
31.1	Certification of the Chief Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934	
31.2	Certification of the Chief Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934	
32.1	Certification of the Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted	

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<b>Exhibit Number</b>	<b>Description of Document</b>
	Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*	Incorporated by reference to the Registrant's Registration Statement on Form 10-SB, as filed with the Commission on June 13, 2001.
**	Incorporated by reference to the Registrant's Quarterly Report on Form 10-QSB for the period ended September 30, 2001, as filed with the Commission on November 14, 2001.
***	Incorporated by reference to the Registrant's Current Report on Form 8-K/A as filed with the Commission on March 8, 2002.
****	Incorporated by reference to the Registrant's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2002, as filed with the Commission on March 31, 2003.

**PRO-PHARMACEUTICALS, INC.  
EMPLOYMENT AGREEMENT**

EMPLOYMENT AGREEMENT, made this eighteenth day of March 2003 (this "Agreement"), with an effective date as hereinafter set forth, between Pro-Pharmaceuticals, Inc., a Nevada corporation having an address of 189 Wells Avenue, Suite 200, Newton, Massachusetts 02459 (the "Company"), and David A. Christopher, an individual residing at 28 Spring Hill Road, Bedford, New Hampshire 03110 (the "Employee").

WHEREAS, the Company desires to hire the Employee, and Employee desires to be employed by the Company, on the terms and conditions set forth in this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the parties agree as follows:

**1. Employment.**

The Company shall employ the Employee on an "at will" basis, and Employee agrees to be so employed, with the title of Chief Financial Officer, and report to the Chief Executive Officer of the Company (the "CEO") or such other officer as the CEO may designate. The Employee acknowledges that Employee's employment by the Company will commence on April 1, 2003 (the "Effective Date"). The Employee agrees that, to the best of the Employee's ability and experience, Employee will at all times conscientiously perform all of the duties and obligations assigned to the Employee under this Agreement.

**2. Salary; Reimbursement of Expenses.**

(a) Salary. The Employee's salary for the period commencing on the Effective Date will be \$10,833.33 per month, less required withholdings, payable on the Company's regular payroll dates. The Employee's salary shall be reviewed at least annually and is subject to adjustment in connection therewith. Such salary as in effect from time to time is herein referred to as the "Base Salary".

(b) Reimbursement of Expenses. The Company shall reimburse the Employee for all reasonable and appropriate or necessary out-of-pocket expenses incurred in connection with the Employee's carrying out the Employee's duties under this Agreement, in conformity with such procedures as the Company may establish from time to time.

**3. Benefits; Vacation.**

The Employee will be entitled to (i) health and dental insurance coverage for himself and his family, to be paid in full by the Company, (ii) three (3) weeks vacation in each year, pro-rated on a monthly basis, and customary holidays, and (iii) other benefits commensurate with the Employee's position in accordance with the Company's standard employee benefits policies as in effect from time to time.

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To the extent the Company obtains insurance with respect to (i) directors' and officers' liability, (ii) errors and omissions and (iii) general liability insurance, the Employee shall be covered by such insurance to the same extent as other senior executives and directors of the Company.

**4. Conflicting Employment.** The Employee while employed by the Company will not engage in any other employment, occupation, consulting or other business activity related to the business in which the Company is now involved or becomes involved, nor will the Employee engage in any other activities that conflict with the Employee's obligations to Company.

**5. Compliance with Company Policy.** During this agreement, the Employee shall observe all Company rules and policies, including such policies as are contained in the Company policy and procedures manual as from time to time adopted or amended.

**6. Termination of Employment.**

(a) For Cause. The Company shall have the right, upon written notice thereof to the Employee, to terminate the Employee's employment hereunder immediately if

(i) the Employee

(A) fails or refuses in any material respect to perform any duties consistent with the terms hereof communicated to the Employee in writing by the CEO.

(B) is grossly negligent in the performance of the Employee's duties hereunder,

(C) is convicted of a felony or other violation which in the reasonable judgment of the CEO could materially impair the Company from substantially meeting its business objectives, or

(D) is found to have committed any act of fraud, misappropriation of funds or embezzlement with respect to the Company; and

(ii) except as to the matters referred to in clauses (C) or (D), within thirty (30) days (the "Cure Period") after delivery of written notice from the CEO or the Board of Directors of the Company (the "Board") stating with specificity the nature of the reason for an anticipated for-cause termination, the Employee fails to cure, or if the matter is not curable within the Cure Period, the Employee fails in the judgment of the CEO within the Cure Period to undertake diligently to cure such, failure, refusal or negligence.

In the event of termination pursuant to this Section 6(a), the Employee shall be entitled to the payments and benefits set forth in Sections 2 and 3 hereof through the end of the Cure Period with respect to termination pursuant to Section 6(a)(A) or (B) and as of the date of termination with respect to termination pursuant to Section 6(a)(C) or (D).

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(b) Without Cause. Each of the Company or the Employee may terminate this Agreement at any time without cause upon thirty (30) days prior written notice. In the event the employment of the Employee is terminated by the Company under this Section 6(b), in that event:

(i) if termination occurs within six (6) months after the Effective Date, the Employee shall be paid as severance in an amount equal to Base Salary for one month, or

(ii) if the termination occurs later than six (6) months after the Effective Date, the Employee shall be paid a severance equal to Base Salary for two (2) months plus, with respect to each full year of service to the Company, one (1) month, the aggregate of such severance in any event not to exceed six (6) months of Base Salary; and

(iii) the Employee shall be reimbursed for all expenses pursuant to Section 2 incurred through the date of termination; and

(iv) the Employee shall be entitled to receive following the date of termination two (2) months of benefits, to the extent permitted by law, to which he was entitled pursuant to Section 3 hereof while he was employed by the Company,.

(c) Survival of Obligations. The obligations of the Corporation and the Employee set forth in Section 2(b) (reimbursement of expenses), in this Section 6, Section 7 (confidentiality), Section 8 (assignment of inventions), Section 10 (non-solicitation), Section 11 (non-competition) and Section 12 (publications) will survive the termination of Employee's employment hereunder, regardless of cause.

### **7. Confidential Information.**

(a) Company Information. The Employee agrees at all times during the term of the Employee's employment or other involvement with the Company and thereafter to hold in strictest confidence, and not to use, except for the benefit of the Company, or to disclose to, or permit the use by, any person, firm or corporation without written authorization of its Board of Directors, any Confidential Information of the Company. The Employee understands that "Confidential Information" means any Company proprietary information, technical data, trade secrets or know-how or other business information disclosed to the Employee by the Company, either directly or indirectly in writing, orally or by drawings or inspection of parts or equipment, including, but not limited to:

(i) medical and drug research and testing results and information, research and development techniques, processes, methods, formulas, trade secrets, patents, patent applications, computer programs, software, electronic codes, mask works, inventions, machines, innovations, ideas, designs, creations, writings, books and other works of authorship, discoveries, improvements, data, formats, projects and research projects;

(ii) information about costs, profits, markets, sales, contracts and lists of customers, and distributors, business, marketing, and strategic plans, forecasts,

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unpublished financial information, budgets, projections, and customer identities, characteristics and agreements as well as all business opportunities, conceived, designed, devised, developed, perfected or made by the Employee, whether alone or in conjunction with others, and related in any manner to the actual or anticipated business of the Company or to actual or anticipated areas of research and development; and

(iii) employee personnel files and compensation information.

The Employee further understands that Confidential Information does not include any of the foregoing items which (A) has become publicly known or made generally available to the public through no wrongful act of the Employee, (B) has been disclosed to the Employee by a third party having no duty to keep Company matters confidential, (C) has been developed by the Employee independently of employment by the Company, (D) has been disclosed by the Company to a third party without restrictions on disclosure, or (E) has been disclosed with the Company's written consent. The Employee further agrees that all Confidential Information shall at all times remain the property of the Company.

(b) Former Employer Information. The Employee agrees that the Employee will not improperly use or disclose any proprietary information or trade secrets of any former employer or other person or entity with which the Employee has an agreement or duty to keep in confidence information acquired by the Employee and that the Employee will not bring onto the premises of the Company any unpublished document or proprietary information belonging to any such employer, person or entity unless consented to in writing by such employer, person or entity.

(c) Future Third Party Information. The Employee recognizes that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. The Employee agrees to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation or to use it except as necessary in carrying out the Employee's work for the Company consistent with the Company's agreement with such third party.

(d) Prior Actions and Knowledge. The Employee represents and warrants that from the time of the Employee's first contact with the Company, the Employee has held in strict confidence all Confidential Information and has not disclosed any Confidential Information, directly or indirectly, to anyone outside the Company, or used, copied, published, or summarized any Confidential Information, except to the extent otherwise permitted in this Agreement.

(e) Third Parties. The Employee will not disclose to the Company or use on its behalf any confidential information belonging to others, and the Employee will not bring onto the premises of the Company any confidential information belonging to any such party unless consented to in writing by such party.

## **8. Inventions**

(a) Inventions Retained and Licensed. Attached hereto, as Exhibit A, is a list describing all ideas, processes, trademarks, service marks, inventions, designs, technologies, computer

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hardware or software, original works of authorship, formulas, discoveries, patents, copyrights, copyrightable works, products, marketing and business ideas, and all improvements, know-how, data, rights, and claims related to the foregoing, whether or not patentable, registrable or copyrightable, which were conceived, developed or created by the Employee prior to Employee's employment or first contact with the Company (collectively referred to as "Prior Inventions"), (A) which belong to the Employee, (B) which relate to the Company's current or contemplated business, products or research and development, and (C) which are not assigned to the Company hereunder. If there is no Exhibit A or no items thereon, the Employee represents that there are no such Prior Inventions. If in the course of Employee's employment with the Company, the Employee incorporates or embodies into a Company product, service or process a Prior Invention owned by the Employee or in which the Employee has an interest, the Company is hereby granted and shall have a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, use and sell such Prior Invention as part of or in connection with such product, service or process.

(b) Assignment of Intellectual Property Items. The Employee agrees that Employee will promptly make full written disclosure to the Company and will hold in trust for the sole right and benefit of the Company, and the Employee hereby assigns to the Company, or its designee, all of the Employee's right, title and interest in and to any and all ideas, processes, trademarks, service marks, inventions, designs, technologies, computer hardware or software, original works of authorship, formulas, discoveries, patents, copyrights, copyrightable works, products, marketing and business ideas, and all improvements, know-how, data, rights, and claims related to the foregoing, whether or not patentable, registrable or copyrightable, which the Employee may, on or after the Effective Date, solely or jointly with others conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of time the Employee is in the employ of the Company (collectively referred to as "Intellectual Property Items"); and the Employee further agrees that the foregoing shall also apply to Intellectual Property Items which relate to the business of the Company or to the Company's anticipated business as of the end of the Employee's employment and which are conceived, developed, or reduced to practice during a period of one year after the end of such employment. Without limiting the foregoing, the Employee further acknowledges that all original works of authorship which are made by the Employee (solely or jointly with others) within the scope of the Employee's employment and which are protectable by copyright are works made for hire as that term is defined in the United States Copyright Act.

(c) Maintenance of Records. The Employee agrees to keep and maintain adequate and current written records of all Intellectual Property Items made by the Employee (solely or jointly with others) during the term of the Employee's employment with the Company. The records will be in the form of notes, sketches, drawings, and any other format that may be specified by the Company. The records will be available to, and remain the sole property of, the Company at all times.

(d) Patent and Copyright Registrations. The Employee agrees to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Intellectual Property Items and any copyrights, patents, mask work rights or other intellectual property rights relating thereto in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto and the execution of all applications,

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specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns and nominees the sole and exclusive rights, title and interest in and to such Intellectual Property Items, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto.

(e) No Use of Name. The Employee shall not at any time use the Company's name or any of the Company trademark(s) or trade name(s) in any advertising or publicity without the prior written consent of the Company.

**9. Return of Company Property.** The Employee agrees that, at any time upon request of the Company, and in any event at the time of leaving the employ of the Company, Employee will deliver to the Company (and will not keep in the Employee's possession or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any of the aforementioned items, containing Confidential Information or otherwise belonging to the Company, its successors or assigns, whether prepared by the Employee or supplied to the Employee by the Company.

**10. Non-Solicitation.** The Employee agrees that Employee shall not during the Employee's employment or other involvement with the Company and for a period of twelve (12) months immediately following the termination of the Employee's employment with the Company for any reason, whether with or without cause, (i) either directly or indirectly solicit or take away, or attempt to solicit or take away employees of the Company, either for the Employee's own business or for any other person or entity, or (ii) either directly or indirectly recruit, solicit or otherwise induce or influence any proprietor, partner, stockholder, lender, director, officer, employee, sales agent, joint venturer, investor, lessor, supplier, customer, agent, representative or any other person which has a business relationship with the Company to discontinue, reduce or modify such employment, agency or business relationship with the Company.

## **11. Covenants Against Competition.**

(a) Definitions. For the purposes of this Section:

(i) "Competing Product" means any product, process, or service of any person or organization other than the Company, in existence or under development (A) which is identical to, substantially the same as, or an adequate substitute for any product, process, or service of the Company, in existence or under development, based on any patent or patent application (provisional or otherwise) naming Employee as inventor thereunder and which Employee has assigned or licensed to the Company, or other intellectual property of the Company about which the Employee acquires Confidential Information, and (B) which is (or could reasonably be anticipated to be) marketed or distributed in such a manner and in such a geographic area as to actually compete with such product, process or service of the Company.

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(ii) “Competing Organization” means any person or organization, including the Employee, engaged in, or about to become engaged in, research on or the acquisition, development, production, distribution, marketing, or providing of a Competing Product.

(b) Non-Competition. As a material inducement to the Company to employ or continue the employment of the Employee, and in order to protect the Company’s Confidential Information and good will, the Employee agrees to the following stipulations:

(i) For a period of twelve (12) months after termination of the Employee’s employment with the Company or its affiliates for any reason, whether with or without cause, the Employee will not directly or indirectly solicit or divert or accept business relating in any manner to Competing Products or to products, processes or services of the Company, from any of the customers or accounts of the Company with which the Employee had any contact as a result of the Employee’s employment.

(ii) For a period of six (6) months after termination of the Employee’s employment with the Company for any reason, whether with or without cause, the Employee will not (A) render services directly or indirectly, as an employee, consultant or otherwise, to any Competing Organization in connection with research on or the acquisition, development, production, distribution, marketing or providing of any Competing Product, or (B) own any interest in any Competing Organization.

(c) Modification of Restrictions. The Employee agrees that the restrictions set forth in this Section are fair and reasonable and are reasonably required for the protection of the interests of the Company. However, should an arbitrator or court nonetheless determine at a later date that such restrictions are unreasonable in light of the circumstances as they then exist, then the Employee agrees that this Section shall be construed in such a manner as to impose on the Employee such restrictions as may then be reasonable and sufficient to assure Company of the intended benefits of this Section.

**12. Publications.** The Employee agrees that Employee will in advance of publication provide the Company with copies of all writings and materials which Employee proposes to publish during the term of the Employee’s employment and for one year thereafter. The Employee also agrees that Employee will, at the Company’s request, cause to be deleted from such writings and materials any information disclosing Confidential Information. The Company’s good faith judgment in these matters will be final. At the Company’s sole discretion, the Employee will also, at the Company’s request, cause to be deleted any reference whatsoever to the Company from such writings and materials.

**13. Equitable Remedies.** The Employee agrees that it would be impossible or inadequate to measure and calculate the Company’s damages from any breach of the covenants set forth in Sections 7, 8, 9, 10, 11 and 12 herein. Accordingly, at the sole discretion of the Company, the Employee agrees that if Employee breaches any of such Sections, the Company will have, in addition to any other right or remedy available, the right to obtain an injunction from a court of competent jurisdiction restraining such breach or threatened breach and to specific performance of any such provision of this Agreement and, if it prevails in such a proceeding, the right to recover from the Employee the costs and expenses thereof, including reasonable attorneys’ fees.

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**14. Representations and Warranties of Employee.** The Employee represents and warrants as follows: (i) that the Employee has no obligations, legal or otherwise, inconsistent with the terms of this Agreement or with the Employee's undertaking a relationship with the Company; and (ii) that Employee has not entered into, nor will Employee enter into, any agreement (whether oral or written) in conflict with this Agreement.

## **15. Miscellaneous.**

(a) Entire Agreement. This Agreement contains the entire understanding of the parties with respect to the subject matter. It may not be changed orally but only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification, extension or discharge is sought.

(b) No Waiver. The failure of either party to insist on strict compliance with the terms of this agreement in any instance or instances will not be deemed a waiver of any such term of this Agreement or of that party's right to require strict compliance with the terms of this Agreement in any other instance.

(c) Successors and Assigns. This Agreement shall be binding on and inure to the benefit of the successors in interest of the parties, including, in the case of the Employee, the Employee's heirs, executors and estate. The Employee may not assign the Employee's obligations under this Agreement. The Company may not assign its obligations under this Agreement, except with the prior written consent of the Employee.

(d) Notices. Any notices or other communications provided for hereunder may be made by telecopier, first class mail or express courier services provided that the same are addressed to the party required to be notified at its address first written above, or such other address as may hereafter be established for notices, and any notices or other communications sent by first class mail shall be considered to have been made when posted. The parties telecopier numbers are as follows: Company – (617) 928-3450; Employee – (603) 488-9600 (must call before fax is sent).

(e) Severability. If any term or condition of this Agreement shall be invalid or unenforceable to any extent or in any application, then the remainder of this Agreement, and such term or condition except to such extent or in such application, shall not be affected thereby, and each and every term and condition of this Agreement shall be valid and enforceable to the fullest extent and in the broadest application permitted by law.

(f) Captions; Gender. Captions of sections herein are for convenience only and are not intended to cover all matters therein. Any pronoun or other gender-linked term shall in each case refer, as applicable, to the masculine, feminine or neuter. Any defined term shall include its singular or plural form or other part of speech.

(g) Governing Law. This Agreement shall be construed and enforced in accordance with the laws of The Commonwealth of Massachusetts without giving effect to its principles on conflict of laws.

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IN WITNESS WHEREOF, the parties hereto have executed this Employment Agreement as of the date and year first above written.

PRO-PHARMACEUTICALS, INC.

By: \_\_\_\_\_ /s/ David Platt

**Name: David Platt**  
**Title: Chief Executive Officer**

By: \_\_\_\_\_ /s/ David A. Christopher

**Name: David A. Christopher**  
**Title: Chief Financial Officer**

**Exhibit A**

List of Prior Inventions  
and Original Works of Authorship

<u>Title</u>	<u>Date</u>	<u>Identifying Number or Brief Description</u>
-----NONE-----		

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By: \_\_\_\_\_ /s/ David A. Christopher

**Name:** David A. Christopher  
**Title:** Chief Financial Officer

**Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934**

I, David Platt, certify that:

1. I have reviewed this Form 10-QSB of Pro-Pharmaceuticals, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) [omitted pursuant to Transition Period provisions of Section III of Release 34-47986 of the Securities and Exchange Commission entitled "Management's Reports on Internal Controls Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports"] for the registrant and have:
  - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) [omitted pursuant to Transition Period provisions of Section III of Release 34-47986 of the Securities and Exchange Commission entitled "Management's Reports on Internal Controls Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports"];
  - (c) evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

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(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

/s/ DAVID PLATT

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Name: David Platt  
Title: President, Chief Executive Officer and  
Secretary  
(Principal Executive Officer)

Dated: August 14, 2003

**Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934**

I, David A. Christopher, certify that:

1. I have reviewed this Form 10-QSB of Pro-Pharmaceuticals, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) [omitted pursuant to Transition Period provisions of Section III of Release 34-47986 of the Securities and Exchange Commission entitled "Management's Reports on Internal Controls Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports"] for the registrant and have:
  - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) [omitted pursuant to Transition Period provisions of Section III of Release 34-47986 of the Securities and Exchange Commission entitled "Management's Reports on Internal Controls Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports"];
  - (c) evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

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(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

/s/ DAVID A. CHRISTOPHER

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Name: David A. Christopher  
Title: Chief Financial Officer and Treasurer (Principal  
Financial and  
Accounting Officer)

Dated: August 14, 2003

**CERTIFICATION PURSUANT TO  
18 U.S.C SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Pro-Pharmaceuticals, Inc. (the "Company") on Form 10-QSB for the period ended June 30, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Platt, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ DAVID PLATT

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Name: David Platt  
Title: President, Chief Executive Officer and  
Secretary  
(Principal Executive Officer)

Dated: August 14, 2003

A signed original, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906 has been provided to Pro-Pharmaceuticals, Inc. and will be retained by Pro-Pharmaceuticals, Inc. and furnished the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO  
18 U.S.C SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Pro-Pharmaceuticals, Inc (the "Company") on Form 10-QSB for the period ended June 30, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David A. Christopher, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ DAVID A. CHRISTOPHER

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Name: David A. Christopher  
Title: Chief Financial Officer and Treasurer  
(Principal Financial and  
Accounting Officer)

Dated: August 14, 2003

A signed original, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906 has been provided to Pro-Pharmaceuticals, Inc. and will be retained by Pro-Pharmaceuticals, Inc. and furnished the Securities and Exchange Commission or its staff upon request.