

Woodbury, New York 11797

(516) 364-1902

**(Name, address, including zip code, and telephone number,
including area code, of agent for service)**

**Copies of all communications, including all communications sent to
the agent for service, should be sent to:**

Seth Van Voorhees

Vice President and Chief Financial Officer

Research Frontiers Incorporated

240 Crossways Park Drive

Woodbury, New York 11797

(516) 364-1902

Approximate date of commencement of proposed sale to the public: From time to time on or after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. []

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [X]

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the

following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer Accelerated filer Non-accelerated filer

Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered | Proposed maximum offering price per Share | Proposed maximum aggregate offering price | Amount of registration fee |
|---|--------------------------------|--|--|-----------------------------------|
| Primary Offering: | | | | |
| Common Stock, \$0.0001 par value per share | 6,325,000 (1) | \$ 0.96 | (2) \$6,072,000 (2) | \$ 755.96 |
| Warrants to Purchase Common Stock (3) | | | (4) | (4) |

(1) The price is estimated in accordance with Rule 457(c) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee and is \$0.96 which was calculated based upon the average of the high and low trading price per share of common stock of Research Frontiers Incorporated on the Nasdaq Capital Market on March 9, 2018, which was within five business days of the original filing of this Registration Statement.

(2) Pursuant to Rule 416 under the Securities Act, this Registration Statement also relates to an indeterminate number of additional shares of our common stock which may become issuable by reason of any stock split, stock dividend,

recapitalization, or similar transaction that is effected without the receipt of consideration and results in an increase in the number of shares of our common stock that are outstanding.

(3) An indeterminate number of warrants to purchase the shares of Common Stock registered hereunder.

(4) Pursuant to Rule 457(g), no separate registration fee is required.

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

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

PROSPECTUS

SUBJECT TO COMPLETION, DATED MARCH 13, 2018

RESEARCH FRONTIERS INCORPORATED

6,325,000 Shares

Common Stock

Research Frontiers Incorporated may from time to time issue up to 6,325,000 shares of common stock, and/or warrants to purchase such common stock. A general description of the known material terms of the securities we are offering is included herein. We will specify in an accompanying prospectus supplement any specific material terms of the securities offered which are unknown as of the date of this prospectus. We may sell these securities to or through underwriters and also to other purchasers or through agents. We will set forth the names of any underwriters or agents in the accompanying prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market under the symbol "REFR." The last reported sale price of our common stock on the Nasdaq Capital Market on March 9, 2018 was \$0.97.

The securities offered in this prospectus involve a high degree of risk. See "Risk Factors" beginning on page 1 for a discussion of the information that should be considered in connection with an investment in our securities.

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

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

The date of this prospectus is March 13, 2018

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You should rely only on the information contained in or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in or incorporated by reference in this prospectus is accurate as of any date other than the date of such document. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

SUMMARY

You should read the entire prospectus, including the section entitled 'Risk Factors,' carefully before making an investment decision.

The Company

We develop and license our suspended particle device light-control technology for controlling the amount of light passing through a device to other companies that manufacture and market either the SPD-Smart chemical emulsion, light-control film made from the chemical emulsion, lamination services, electronics to power end-products incorporating the film, or the end-products themselves such as "smart" windows, skylights and sunroofs. Such suspended particle devices are often referred to as "SPDs," "light valves," or "SPD-Smart" products.

SPD-Smart products use microscopic light-absorbing nanoparticles that are typically suspended in a film. These particles align when an electrical voltage is applied, thus permitting light to pass through the film. Adjustment of the voltage to the SPD film gives users the ability to quickly, precisely and consistently regulate the amount of light, glare and heat passing through the window, skylight, sunroof, window shade or other SPD-Smart end-product. This SPD film can be incorporated between two layers of glass or plastic, or combinations of both, to produce a laminate that has enhanced energy efficiency, light-control and security performance properties. Our offices are located at: 240 Crossways Park Drive, Woodbury, NY 11797 (telephone: 516-364-1902).

RISK FACTORS

In addition to the other information in this prospectus, you should carefully consider the following factors in evaluating us and our business before purchasing the shares of common stock offered hereby. This prospectus contains, in addition to historical information, forward-looking statements that involve risks and uncertainties, some of which are beyond our control. Should one or more of these risks and uncertainties materialize or should underlying assumptions prove incorrect, our actual results could differ materially. Factors that could cause or contribute to such differences include, but are not limited to, those discussed below, as well as those discussed elsewhere in this prospectus, including the documents incorporated by reference.

There are risks associated with investing in companies such as ours who are engaged in research and development. Because of these risks, you should only invest if you are able to bear the risk of losing your entire investment. Before investing, in addition to risks which could apply to any issuer or offering, you should also consider the business we are in and the following:

Source and Need for Capital.

As of December 31, 2017, we had approximately \$1.7 million in cash and cash equivalents. In February 2018, a small group of long-time shareholders of the Company made an interest-free five-year loan of \$1.25 million to the Company which, upon the occurrence of certain conditions, is expected to convert into common stock at a price equal to the market price of the Company's common stock when the loan was made, plus warrants exercisable at a premium to such market price. No payments are due on this note during its five-year term.

As we take steps in the commercialization and marketing of our technology, or respond to potential opportunities and/or adverse events, our working capital needs may change. We anticipate that if our cash and cash equivalents are insufficient to satisfy our liquidity requirements, we will require additional funding to sustain our ongoing operations and to continue our SPD technology research and development activities.

We have funded most of our activities through sales of our common stock to investors, and upon the exercise of options and warrants. Eventual success of the Company and generation of positive cash flow will be dependent upon the extent of commercialization of products using the Company's technology by the Company's licensees and payments of continuing royalties on account thereof. We can give no assurances that we will generate sufficient revenues in the future (through sales of our common stock, exercise of options and warrants, royalty fees, or otherwise) to satisfy our liquidity requirements or sustain future operations, or that additional funding, if required, will be available when needed or, if available, on favorable terms.

History of Operating Losses.

We have experienced net losses from operations, and we may continue to incur net losses from operations in the future. We have incurred substantial costs and expenses in researching and developing our SPD technology. As of December 31, 2017, we had a cumulative net loss of \$109,062,827 since our inception. Our net loss was \$2,413,859 in 2017, \$4,238,410 in 2016 and \$4,279,856 in 2015, (which includes non-cash accounting charge in 2017, 2016 and 2015 of \$76,299, \$67,531 and \$725,016 respectively, resulting from the expensing of grants of restricted stock and stock options).

We may not generate sufficient cash flows to cover our operating expenses.

As noted above, we have incurred recurring losses since inception and expect to continue to incur losses as a result of costs and expenses related to our research and continued development of our SPD technology and our corporate general and administrative expenses. Our limited capital resources and operations to date have been substantially funded through sales of our common stock, exercise of options and warrants and royalty fees collected. As of December 31, 2017, we had working capital of approximately \$2.1 million, cash and cash equivalents of approximately \$1.7 million, shareholders' equity of approximately \$2.6 million and an accumulated deficit of approximately \$109.1 million. In the event that we are unable to generate sufficient cash from our operating activities or raise additional funds, we may be required to delay, reduce or severely curtail our operations or otherwise impede our on-going business efforts, which could have a material adverse effect on our business, operating results, financial condition and long-term prospects.

We have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.

We have never declared or paid cash dividends on our common stock. Payment of dividends on our common stock is within the discretion of our Board of Directors and will depend upon our future earnings, capital requirements, financial condition and other relevant factors. We do not anticipate declaring or paying any cash dividends on our common stock in the foreseeable future.

We do not directly manufacture products using SPD technology. We currently depend upon the activities of our licensees and their customers in order to be profitable.

We do not directly manufacture products using SPD technology. We currently depend upon the activities of our licensees in order to be profitable. Although a variety of products have been sold by our licensees, and because it is up to our licensees to decide when and if they will introduce products using SPD technology, we cannot predict when and if our licensees will generate substantial sales of such products. Our SPD technology is currently licensed to over 40 companies. Other companies are also evaluating SPD technology for use in various products. In the past, some companies have evaluated our technology without proceeding further. While we expect that our licensees would be primarily responsible for manufacturing and marketing SPD-Smart products and components, we are also engaging in market development activities to support our licensees and build the smart glass industry. We cannot control whether or not our licensees will develop SPD products. Some of our licensees appear to be more active than others, some appear to be better capitalized than others, and some licensees appear to be inactive. There is no guarantee when or if our licensees will successfully produce any commercial product using SPD technology in sufficient quantities to make the Company profitable.

SPD-Smart products have only recently been introduced.

Products using SPD technology have only recently begun to be introduced into the marketplace. Developing products using new technologies can be risky because problems, expenses and delays frequently occur, and costs may or may not come down quickly enough for such products using new technologies to rapidly penetrate mass market applications.

SPD-Smart products face intense competition, which could affect our ability to increase our revenues.

The market for SPD-Smart products is intensely competitive and we expect competition to increase in the future. We compete based on the functionality and the quality of our product. Many of our current and potential competitors have significantly greater financial, technical, marketing and other resources than we have. In addition, many of our competitors have well-established relationships with our current and potential customers and have extensive knowledge of our industry. If our competitors develop new technologies or new products, improve the functionality or quality of their current products, or reduce their prices, and if we are unable to respond to such competitive developments quickly either because our research and development efforts do not keep pace with our competitors or because of our lack of financial resources, we may be unable to compete effectively.

Declining production of automobiles, airplanes, boats and real estate could harm our business.

Our licensees' commercialization efforts of SPD-Smart products could be negatively impacted if the global production of automobiles, airplanes, boats and real estate construction declines significantly. If such commercialization is reduced, our revenues, results of operations and financial condition could be negatively impacted.

Single source of SPD film.

Our end-product licensees require a source of SPD film to manufacture finished products. Currently, Hitachi Chemical is the sole source of commercial quantities of SPD-film. There are several other companies that are licensed to manufacture SPD-film, but they have not begun commercial production of this film. Our end-product licensees' ability to sell SPD products could be negatively impacted if there was a prolonged disruption in SPD-film availability. Such a disruption could also negatively impact our revenues, results of operations and financial condition.

We are dependent on key personnel.

Our continued success will depend, to a significant extent, on the services of our directors, executive management team, key personnel and certain key scientists. If one or more of these individuals were to leave the Company, there is no guarantee that we could replace them with qualified individuals in a timely or economically satisfactory manner or at all. The loss or unavailability of any or all of these individuals could harm our ability to execute our business plan, maintain important business relationships and complete certain product development initiatives, which would have a material adverse effect on our business, results of operations and financial conditions.

Dependence on SPD-Smart technology.

Because SPD technology is the only technology we work with, our success depends upon the viability of SPD technology which has yet to be fully proven. We have not fully ascertained the performance and long-term reliability of our technology, and therefore there is no guarantee that our technology will successfully be incorporated into all of the products which we are targeting for use of SPD technology. We expect that different product applications for SPD technology will have different performance and reliability specifications. We expect that our licensees will primarily be responsible for reliability testing, but that we may also continue to do reliability testing so that we can more effectively focus our research and development efforts towards constantly improving the performance characteristics and reliability of products using SPD technology.

Our patents and other protective measures may not adequately protect our proprietary intellectual property, and we may be infringing on the rights of others.

Our intellectual property, particularly our proprietary rights in our SPD technology, is critical to our success. We have received various patents, and filed other patent applications, for various applications and aspects of our SPD technology. In addition, we generally enter into confidentiality and invention agreements with our employees and consultants. Such patents and agreements and various other measures we take to protect our intellectual property from use by others may not be effective for various reasons generally applicable to patents and their granting and enforcement. In addition, the costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may be expensive. Our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could harm our ability to generate revenues and, as a result, our business and operations.

An unremediated material weakness in our internal control over financial reporting could adversely affect our reputation, business or stock price.

We previously identified a control deficiency constituting a material weakness in our internal control over financial reporting related to our controls over the determination of our allowance for doubtful accounts in 2016. We developed and implemented a plan to remediate this material weakness and based on our evaluation have concluded that this material weakness has been remediated during 2017.

We have broad discretion in the use of the proceeds of this offering.

All of our net proceeds from this offering will be used, as determined by management in its sole discretion, for working capital and other general corporate purposes. Our management will have broad discretion over the use and investment of the net proceeds of this offering and there is no assurance that management's chosen application of proceeds will yield intended results. You will not have the opportunity, as part of your investment decision, to assess whether our proceeds are being used appropriately. Pending application of our proceeds, they might be placed in investments that do not produce income or that lose value.

Future sales of our securities could cause our stock price to decline.

If we or our stockholders sell substantial amounts of our common stock in the public market, the market price of our common stock could decrease. The perception in the public market that we or our stockholders might sell shares of our common stock could also depress the market price of our common stock. A decline in the price of shares of our common stock might impede our ability to raise capital through the issuance of additional shares of our common stock or other equity securities.

Our common stock has historically experienced low trading volume.

Our common stock is listed on the Nasdaq Capital Market and has historically experienced low trading volume and there is no assurance that the increased trading volume will continue or be maintained. Reported average daily trading volume in our common stock for 2017 was approximately 53,644 shares. Limited trading volume subjects our common stock to greater price volatility and may make it difficult for you to sell your shares at a particular price.

Our ability to use net operating loss carryforwards might be limited.

At December 31, 2017, we had a net operating loss carryforward for federal income tax purposes of \$73 million, varying amounts of which will expire in each year from 2018 through 2037. To the extent these net operating loss carryforwards are available, we intend to use them to reduce any corporate income tax liability associated with our operations we might have in the future. Section 382 of the Internal Revenue Code generally imposes an annual limitation on the amount of net operating loss carryforwards that might be used to offset taxable income when a corporation has undergone significant changes in stock ownership. As a result, prior or future changes in ownership could put limitations on the availability of our net operating loss carryforwards. In addition, our ability to utilize the current net operating loss carryforwards might be further limited by the issuance of securities in this offering or future offerings. To the extent our use of our net operating loss carryforwards or tax losses is limited, our income could be subject to corporate income tax earlier than it would if we were able to use net operating loss carryforwards, which could result in lower profits.

Our organizational documents, stockholders' rights plan and Delaware law make a takeover of our company more difficult, which may prevent certain changes in control and limit the market price of our common stock.

Our certificate of incorporation, bylaws, stockholders' rights plan and Section 203 of the Delaware General Corporation Law contain provisions that may have the effect of deterring or delaying attempts by our stockholders to remove or replace management, engage in proxy contests and effect changes in control. These provisions of our certificate of incorporation and bylaws include:

the authority for our board of directors to issue without stockholder approval up to 100,000,000 shares of common stock, that, if issued, would dilute the ownership of our stockholders;

the advance notice requirement for director nominations or for proposals that can be acted upon at stockholder meetings;

a classified board of directors, which may make it more difficult for a person who acquires control of a majority of our outstanding voting stock to replace all or a majority of our directors;

the ability of our directors to fill any vacancy on our board of directors by the affirmative vote of a majority of the directors then in office under certain circumstances;

limitations on the ability of our stockholders to act by written consent;

limitations on who may call a special meeting of stockholders;

the prohibition on stockholders accumulating their votes for the election of directors;

the limitation on the removal of any of our directors by either an affirmative vote of the continuing directors (as defined in our certificate of incorporation) other than the subject director or by the affirmative vote of the holders of 80% of our outstanding shares of each class of stock having the power to vote in a director election;

the requirement of the affirmative vote of the holders of at least 80% of our outstanding shares of each class of stock having the power to vote in a director election in order for stockholders to adopt, amend or repeal any provision of our certificate of incorporation or bylaws, unless the adoption, amendment or repeal is approved by a majority of the continuing directors (as defined in our certificate of incorporation) present at a meeting at which a quorum of the continuing directors are present; and

the requirement, subject to limited exceptions, of the affirmative vote of the holders of at least 80% of our outstanding shares of each class of stock having the power to vote in a director election in order for us to complete certain business combination transactions with interested stockholders.

We also have adopted a stockholders' rights plan designed to deter stockholders from acquiring shares of stock in excess of 15%. In addition, as a Delaware corporation, we are subject to Delaware law, including Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless certain specific requirements are met as set forth in Section 203.

These provisions could discourage proxy contests and make it more difficult for you and other stockholders to elect directors, replace incumbent management and take other corporate actions. Some provisions in our certificate of incorporation and bylaws may deter third parties from acquiring us, which may limit the market price of our common stock or prevent us from consummating a proposed transaction that our stockholders find to be in their best interests.

AVAILABLE INFORMATION

Research Frontiers files reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy such reports, proxy statements and other information at the public reference room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549 and you can obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an internet web site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding issuers, such as Research Frontiers, that file electronically with the SEC. Additional information about us can also be found at our web site at <http://www.SmartGlass.com>.

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference into this prospectus our:

annual report on Form 10-K for the fiscal year ended December 31, 2017;

the portions of the proxy statement dated April 26, 2017 for our annual meeting of stockholders held on June 8, 2017 that have been incorporated by reference into our report on Form 10-K for the fiscal year ended December 31, 2016;

quarterly reports on Form 10-Q for the fiscal quarters ended March 31, 2017, June 30, 2017, and September 30, 2017;

current reports on Form 8-K filed with the SEC on October 11, 2017, September 1, 2017, August 22, 2017, July 27, 2017, June 12, 2017, May 22, 2017, March 14, 2017, and January 10, 2017.

the description of the capital stock contained in the Research Frontiers registration statements on Form 8-A under the Securities Exchange Act of 1934 dated July 31, 1995, February 24, 2003 and February 13, 2013.

All filings filed by Research Frontiers with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act subsequent to the initial filing of this prospectus and prior to the termination of the offering or sale of all of common stock offered under this prospectus shall be deemed to be incorporated by reference into this prospectus.

This prospectus is part of a registration statement we filed with the SEC. As permitted by the SEC, this prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. The statements contained in this prospectus as to the contents of any contract or any other document are not necessarily complete. In each case you should refer to the copy of such contract or document filed as an exhibit to the registration statement.

We will provide each person to whom this prospectus is delivered, a copy of any information we have incorporated by reference but have not delivered along with this prospectus. If you would like a copy of any document incorporated herein by reference, other than exhibits unless such exhibits are specifically incorporated by reference in any such document, you can call or write to us at our principal executive offices: 240 Crossways Park Drive, Woodbury, New York 11797-2033, Attention: Corporate Secretary (telephone: (516) 364-1902). We will provide this information without charge to any person, including a beneficial owner, to whom a copy of this prospectus is delivered upon written or oral request.

No dealer, salesperson or other individual has been authorized to give any information or to make any representation not contained in or incorporated by reference in this prospectus or in any supplement to this prospectus. If given or made, you must not rely on such information or representation as having been authorized by Research Frontiers. Neither the delivery of this prospectus nor any sale made hereunder will, under any circumstances, create an implication that there has not been any change in the affairs of Research Frontiers since the date of this prospectus or that the information contained herein is correct or complete as of any time after the date of this prospectus.

This prospectus and any supplement to this prospectus do not constitute an offer to sell or a solicitation of an offer to buy any securities offered hereby to any person, or by anyone, in any jurisdiction in which such offer or solicitation may not lawfully be made.

The information set forth herein and in all publicly disseminated information about Research Frontiers, includes “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the safe harbor created by that section. Readers are cautioned not to place undue reliance on these forward-looking statements as they speak only as of the date of this prospectus and are not guaranteed

DIVIDENDS

Research Frontiers has never paid any cash dividends and does not expect to pay any cash dividends for the foreseeable future.

USE OF PROCEEDS

Unless we indicate otherwise in the applicable prospectus supplement, we currently intend to use the net proceeds from this offering for general corporate purposes, including our internal research and development programs, general working capital and possible future acquisitions.

We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering. Pending application of the net proceeds as described above, we intend to invest the net proceeds of the offering in money market funds and other interest-bearing investments.

DESCRIPTION OF SECURITIES

We may sell from time to time, in one or more offerings common stock and/or warrants to purchase common stock.

DESCRIPTION OF COMMON STOCK

We can issue 100,000,000 shares of common stock, \$0.0001 par value per share. As of March 5, 2018, 24,043,846 shares were issued and outstanding. Holders of our common stock are entitled to one vote per share on matters submitted to shareholders for their approval, to dividends if declared by us, and to share in any distribution of our assets. All outstanding shares of common stock are fully paid for and non-assessable. Holders of our common stock do not have cumulative voting rights or preemptive rights. Therefore, a minority stockholder may be less able to gain representation on our board of directors.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol “REFR.”

Transfer Agent and Registrar

Continental Stock Transfer and Trust Company is the transfer agent and registrar for our common stock.

DESCRIPTION OF WARRANTS

The following description sets forth certain general terms and provisions of the warrants offered by us to which any prospectus supplement may relate. The particular terms of the warrants offered, the extent, if any, to which the general terms set forth below apply to the warrants offered, and any modifications or additions to the general terms as they relate to the warrants offered will be described in a prospectus supplement.

We may issue warrants for the purchase of common stock from time to time, and we may issue warrants independently or together with common stock, and the warrants may be attached to or separate from these securities.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

the offering price and aggregate number of warrants offered;

the number of shares of common stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the dates on which the right to exercise the warrants will commence and expire;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

to the extent material, federal income tax consequences of holding or exercising the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of common stock, including the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 6:00 P.M. Woodbury, New York time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information and paying the required amount to the company in immediately available funds. Upon receipt of the required payment and the warrant certificate properly completed and duly executed, we will issue and deliver the number of shares of common stock purchasable upon such exercise. If fewer

than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. Unless we indicate otherwise in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

PLAN OF DISTRIBUTION

We may offer and sell all or a portion of the securities registered pursuant to this prospectus from time to time, in one or more or any combination of the following transactions:

- through dealers or agents to the public or to investors;

- to underwriters for resale to the public or to investors;

- directly to investors; or

- through a combination of such methods.

We will set forth in a prospectus supplement the terms of the offering of securities, including:

- the name or names of any agents, dealers or underwriters;

- the purchase price of the securities being offered and the proceeds we will receive from the sale;

- any over-allotment options under which underwriters may purchase additional securities from us;

- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;

- any initial public offering price;

- any discounts or concessions allowed or reallocated or paid to dealers; and

- any securities exchanges on which the securities may be listed if it is other than the Nasdaq Capital Market.

Underwriters, dealers and agents that participate in the distribution of the securities may be deemed to be underwriters as defined in the Securities Act and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the Securities Act. Underwriters, dealers and agents may engage in transactions with or perform services for us or our subsidiaries in the ordinary course of their businesses. Certain persons that participate in the distribution of the securities may engage in transactions that stabilize, maintain or otherwise affect the price of the securities, including over-allotment, stabilizing and short-covering transactions in such securities, and the imposition of penalty bids, in connection with an offering. Certain persons may also engage in passive market making transactions as permitted by Rule 103 of Regulation M. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

EXPERTS

The consolidated financial statements and schedule of Research Frontiers as of December 31, 2017 and 2016, and for each of the three years in the period ended December 31, 2017, incorporated by reference into this prospectus have been so incorporated in reliance upon the report of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

LEGAL MATTERS

The legality of the securities offered hereby has been passed upon by the Company's General Counsel, Joseph M. Harary. As of March 13, 2018, Mr. Harary owned 497,504 shares (97,560 shares of which are owned by Mr. Harary's children, as to which shares Mr. Harary disclaims beneficial ownership), as well as options to purchase 229,100 shares of common stock.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Estimated expenses relating to the distribution of the Common Stock registered herein are set forth below. Such expenses will be paid by Research Frontiers.

| | |
|---|----------|
| Registration Fee under the Securities Act of 1933 | \$709 |
| Accounting fees and expenses | \$5,000 |
| Miscellaneous expenses | \$5,000 |
| Total | \$10,709 |

All of the amounts set forth above, except for the filing fees for the Securities and Exchange Commission, are estimated and subject to future contingencies.

Item 15. Indemnification of Directors and Officers.

Article EIGHTH of Research Frontiers' Certificate of Incorporation provides for the indemnification of Research Frontiers' officers and directors to the fullest extent permitted by Section 145 of the Delaware General Corporation Law (the "GCL").

Section 145 of the GCL provides as follows:

145 Indemnification of Officers, Directors, Employees and Agents; Insurance

(a) A corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

(b) A corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

(c) To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

(d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made with respect to a person who is a director or officer at the time of such determination, (1) by a majority vote of the directors who are not parties to such action, suit or proceeding, or (2) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (3) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (4) by the stockholders.

(e) Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems appropriate.

(f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office.

(g) A corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under this section.

(h) For purposes of this section, references to "the corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and

employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued.

(i) For purposes of this section, references to “other enterprises” shall include employee benefit plans; references to “fines” shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to “serving at the request of the corporation” shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this section.

(j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section or under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation's obligation to advance expenses (including attorneys' fees).

Article NINTH of Research Frontiers' Certificate of Incorporation provides for the elimination of any personal liability for monetary damages of directors to the Corporation or its stockholders for breach of fiduciary duty, for negligence or for taking or omitting to take any action to the fullest extent permitted by Section 102(b) (7) of the GCL.

Section 102(b) (7) of the GCL provides as follows:

(b) In addition to the matters required to be set forth in the certificate of incorporation by subsection (a) of this section, the certificate of incorporation may also contain any or all of the following matters:

(7) A provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under section 174 of this Title, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision shall eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision becomes effective. All references in this paragraph to a director shall also be deemed to refer (x) to a member of the governing body of a corporation which is not authorized to issue capital stock, and (y) to such other person or persons, if any, who, pursuant to a provision of the certificate of incorporation in accordance with section 141(a) of this title, exercise or perform any of the powers or duties otherwise conferred or imposed upon the board of directors by this title.

Item
16. Exhibits.

4.1 Restated Certificate of Incorporation of the Company (previously filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1994, which is incorporated herein by reference).

4.2 Amended and Restated Bylaws of the Company (previously filed as Exhibit 99.2 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007 (Reg. No. 001-09399), which is incorporated herein by reference).

- 4.3 Rights Agreement dated as of February 18, 2013 between the Company and Continental Stock Transfer & Trust Company, as Rights Agent, which includes as Exhibit A thereto the Form of Rights Certificate (previously filed as an Exhibit to the Company's Registration Statement on Form 8-A dated February 13, 2013 (Reg. No. 000-14893), which is incorporated herein by reference).
- 5.1 Opinion re legality of the securities being registered. (Filed herewith)
- 23.1 Consent of BDO USA, LLP (Filed herewith).
- 23.3 Consent of Legal Counsel (included in Exhibit 5.1)
- 24 Power of Attorney. (Included on signature page)

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Item 17. Undertakings.

The undersigned registrant hereby undertakes:

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

(a) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

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

(c) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, the foregoing paragraphs do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(a) If the registrant is relying on Rule 430B:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(b) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(a) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(b) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(c) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(d) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of any employee benefit plan's annual report pursuant to section 15(d) of the Securities Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Act") may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Woodbury, State of New York, on March 13, 2018.

RESEARCH FRONTIERS INCORPORATED

By: */s/ Joseph M. Harary*

Joseph M. Harary
President, Chief Executive Officer and General Counsel
(Principal Executive Officer)

By: */s/ Seth Van Voorhees*

Seth Van Voorhees
Vice President-Business Development and Chief Financial Officer
(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

We the undersigned directors of Research Frontiers Incorporated each hereby severally constitute and appoint Joseph M. Harary and Seth Van Voorhees, each individually as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and his name, place and stead, and in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments, and to file the same, and any subsequent Registration Statement for the same offering which may be filed under Rule 462(b), with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting to said attorneys-in-fact and agents, and each of them, full power and authority to do and perform such and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

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

| Signature | Title | Date |
|---|---|----------------|
| <i>/s/ Joseph M. Harary</i> Joseph M. Harary | President, Chief Executive Officer, General Counsel, Director (Principal Executive Officer) | March 13, 2018 |
| <i>/s/ Seth Van Voorhees</i> Seth Van Voorhees | Vice President-Business Development and Chief Financial Officer (Principal Financial and Accounting Officer) | March 13, 2018 |
| <i>/s/ Darryl Daigle</i> Darryl Daigle | Director | March 13, 2018 |
| <i>/s/ Gregory G. Grimes</i> Gregory G. Grimes | Director | March 13, 2018 |
| <i>/s/ Alexander Kaganowicz</i> Alexander Kaganowicz | Director | March 13, 2018 |

