RESEARCH FRONTIERS INC Form 424B5 May 08, 2014

> Filed Pursuant to Rule 424(b)(5) Registration Statement No. 333-184785

PROSPECTUS SUPPLEMENT (To Prospectus Dated December 26, 2012)

750,000 Shares of Common Stock

RESEARCH FRONTIERS INCORPORATED

We are offering 750,000 shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus.

Our common stock is listed on the NASDAQ Capital Market under the symbol REFR. On May 6, 2014, the last reported sale price of our common stock on the NASDAQ Capital Market was \$4.86 per share.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should review carefully the information described under the heading Risk Factors beginning on page S-2 of this prospectus supplement and on page 1 of the accompanying prospectus.

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| Public offering price | \$ 4.65 | \$ 3,487,500 |
| Underwriting discounts | \$ 0.2790 | \$ 209,250 |
| Proceeds, before expenses, to us | \$ 4.371 | \$ 3,278,250 |

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

The underwriter expects to deliver the shares of our common stock on or about May 13, 2014, subject to customary closing conditions.

Craig-Hallum Capital Group

The date of this prospectus supplement is May 8, 2014

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You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying 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 supplement or the accompanying prospectus is accurate as of any date other than the date of such document.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus dated December 26, 2012 are part of a shelf registration statement that we have filed with the Securities and Exchange Commission, or SEC, and was declared effective by the SEC. Each time we sell securities under the accompanying base prospectus we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the price, the amount of common stock being offered and the plan of distribution. This prospectus supplement describes the specific details regarding this offering, including the price, the amount and type of securities being offered, the risks of investing in our securities and the underwriting of this offering. The accompanying base prospectus provides general information about us, some of which, such as the section entitled Plan of Distribution, may not apply to this offering.

If information in this prospectus supplement is inconsistent with the accompanying base prospectus or the information incorporated by reference, you should rely on this prospectus supplement. You should read both this prospectus supplement and the accompanying base prospectus together with the additional information about Research Frontiers Incorporated that is incorporated by reference in this prospectus supplement and the accompanying base prospectus.

The following trademarks are property of Research Frontiers: SPD-Smart , SPD-SmartGlass , VaryFast , SPD-CleanTech , SPD Clean Technology , SmartGlass , The View of the Future - Everywhere you Look , Powered by SPD , Powered by SPD-CleanTech , Powered by SPD Clean Technology , SG Enabled , SPD Green and Clean , SPD On-Board , Speed Matters , and Visit SmartGlass.com - to change your view of the world . Other trademarks appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein are property of their respective owners.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus supplement and the accompanying base prospectus carefully, including the section entitled "Risk Factors" beginning on page S-2 and our consolidated financial statements and the related notes and the other information incorporated by reference into this prospectus supplement and the accompanying prospectus before making an investment decision.

The Company

Research Frontiers Incorporated (together with its subsidiary, Research Frontiers, we or the Company) develops and licenses its suspended particle technology for controlling the amount of light passing through a device. Such suspended particle devices are often referred to as SPDs, light valves, or SPD-Smart products.

SPDs use microscopic light-absorbing particles that are either in a liquid suspension or a film. The microscopic particles align when an electrical voltage is applied. This permits light to pass through the device, and allows the amount of light to be controlled. Our offices are located at: 240 Crossways Park Drive, Woodbury, NY 11797 (telephone: 516-364-1902).

The Offering

Securities offered by us: 750,000 shares of common stock

Offering price: \$4.65 per share Common Stock Outstanding after this offering: 23,874,465 shares⁽¹⁾

Use of Proceeds: Working capital and general corporate purposes

NASDAQ Capital Market Symbol: REFR

(1) The number of shares of common stock outstanding after this offering is based upon 23,124,465 shares outstanding as of May 5, 2014. It excludes outstanding options and warrants to purchase 2,869,419 shares of common stock at a weighted average exercise price of \$6.73 per share, and options or other equity awards

for 611,692 shares available for future issuance pursuant to the Company s 2008 Equity Incentive Plan.

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 securities offered hereby. This prospectus supplement, the accompanying prospectus and the information incorporated by reference in this prospectus supplement and the accompanying 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 supplement, the accompany prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus.

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:

RISKS RELATED TO OUR BUSINESS

Source and Need for Capital.

As of March 31, 2014, we had approximately \$10.2 million in cash, cash equivalents and short-term investments. 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 March 31, 2014, we had an accumulated deficit of \$94.5 million. Our annual net loss was \$5,845,087 in 2013, \$3,063,601 in 2012, \$4,134,068 in 2011 and our quarterly net loss was \$1,149,063 in the three months ended March 31, 2014 (which includes non-cash accounting charge in the three months ended March 31, 2014, 2013, 2012 and 2011 of \$52,334, \$2,719,380, \$878,578, and \$702,837, respectively, resulting from the expensing of grants of restricted stock and stock options).

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.

RISKS RELATED TO THIS OFFERING AND OUR COMMON STOCK

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 the 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. Neither we nor any of our directors, officers or stockholders have entered into lockup agreements in connection with this offering.

The low trading volume of our common stock may make it difficult for you to sell your shares at a particular price.

Although our common stock is listed on the NASDAQ Capital Market, our common stock has experienced low trading volume. There is no assurance that this offering will increase the volume of trading in our common stock. 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, 2013, we had a net operating loss carryforward for federal income tax purposes of \$58 million, varying amounts of which will expire in each year from 2014 through 2033. 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.

USE OF PROCEEDS

We currently intend to use the net proceeds from this offering for working capital general corporate purposes, including our internal research and development programs 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.

UNDERWRITING

The underwriter named below has agreed to buy, subject to the terms of the underwriting agreement, the number of shares of common stock listed opposite its name below. The underwriter is committed to purchase and pay for all of the shares if any are purchased.

UnderwriterNumber of SharesCraig-Hallum Capital Group LLC750,000

The underwriter has advised us that it proposes to offer the shares of common stock to the public at a price of \$4.65 per share. The underwriter proposes to offer the shares of common stock to certain dealers at the same price less a concession of not more than \$0.1674 per share. After the offering, these figures may be changed by the underwriter.

The table below summarizes the underwriting discounts that we will pay to the underwriter.

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Underwriting discount to be paid by us

Per Share

\$ 0.2790 \$ 209,250

We estimate that the total expenses of this offering payable by us, excluding underwriting discounts, will be \$60,000.

We also have agreed to indemnify the underwriter against certain liabilities, including civil liabilities under the Securities Act, or to contribute to payments that the underwriter may be required to make in respect of those liabilities.

To facilitate this offering, the underwriter may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after the offering. Specifically, the underwriter may over-allot or otherwise create a short position in our common stock for its own account by selling more shares of common stock than we have sold to the underwriter. The underwriter may close out any short position by purchasing shares in the open market.

In addition, the underwriter may stabilize or maintain the price of our common stock by bidding for or purchasing shares in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to broker-dealers participating in this offering are reclaimed if shares previously distributed in this offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of our common stock to the extent that it discourages resales of our common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NASDAQ Capital Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriter and selling group members may also engage in passive market making transactions in our common stock on the NASDAQ Capital Market. Passive market making consists of displaying bids on the NASDAQ Capital Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of our common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

The underwriter may facilitate the marketing of this offering online directly or through one of its affiliates. In those cases, prospective investors may view offering terms and a prospectus supplement online and place orders online or through their financial advisors.

AVAILABLE INFORMATION

Research Frontiers files reports, proxy statements and other information with the SEC. 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 information on, or that may be accessed through, our web site is not incorporated by reference into and should not be considered a part of this prospectus supplement.

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, 2013;
- the portions of the proxy statement dated April 28, 2014 for our annual meeting of stockholders held on June 12, 2014 that have been incorporated by reference into our report on Form 10-K for the fiscal year ended December 31, 2013;
- quarterly report on Form 10-Q for the fiscal quarter ended March 31, 2014;
- 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 and February 24, 2003 as amended on February 13, 2013; and
- 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 supplement and prior to the termination of the offering or sale of all securities offered under this prospectus supplement shall be deemed to be incorporated by reference into this prospectus supplement (except for information furnished and not filed with the SEC in a Current Report on Form 8-K).

We will provide each person to whom this prospectus supplement is delivered, a copy of any information we have incorporated by reference but have not delivered along with this prospectus supplement. 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 supplement 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.

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.

LEGAL MATTERS

The legality of the securities offered hereby has been passed upon by the law firm of Duane Morris LLP. The underwriter has been represented in connection with this offering by Faegre Baker Daniels LLP, Minneapolis, Minnesota.

EXPERTS

The financial statements and schedule of Research Frontiers as of December 31, 2013 and 2012, and for each of the three years in the period ended December 31, 2013, and management s assessment of the effectiveness over internal control over financial reporting as of December 31, 2013, incorporated by reference into this prospectus supplement have been so incorporated in reliance upon the reports of BDO USA, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.

PROSPECTUS

RESEARCH FRONTIERS INCORPORATED

3,000,000 Shares of Common Stock and Warrants to Purchase Common Stock Offered by Research Frontiers Incorporated

1,250,000 Shares of Common Stock Offered by the Selling Stockholders 250,000 Warrants to Purchase Common Stock Offered by the Selling Stockholders 250,000 Shares of Common Stock Issuable Upon Exercise of the Warrants Offered by the Selling Stockholders

We may from time to time issue up to 3,000,000 shares of common stock and warrants to purchase such common stock and the selling stockholders named in this prospectus may offer, from time to time, up to an additional 1,250,000 shares of our common stock, 250,000 warrants to purchase our common stock, and 250,000 shares of our common stock that are issuable upon the exercise of the warrants held by the selling stockholders. The registration of the offer and sale of shares underlying the 250,000 warrants is limited to transferees of the warrants who acquire those securities in registered transactions following the effective date of this registration statement. The issuance of shares underlying the 250,000 warrants sold in our October 2012 private placement will be issued pursuant to Regulation D of the Securities Act to the extent that those sales of underlying common stock are to holders of the warrants who acquired the warrants in unregistered transactions. A general description of the known material terms of the securities we are offering is included in this prospectus. We will specify in a supplement any specific material terms of the securities offered that are unknown as of the date of this prospectus.

We will not receive any proceeds from the sale of securities offered by the selling stockholders. We will bear the expenses of the offering of the securities, except that the selling stockholders will pay any applicable underwriting fees, discounts or commissions and certain transfer taxes with respect to their securities.

Our registration of the securities covered by this prospectus does not mean that we or the selling stockholders will offer or sell any of the securities. We and the selling stockholders may offer and sell the securities in the same offering or in separate offerings, to or through underwriters, dealers and agents or directly to purchasers. If any agents, dealers or underwriters are involved in the sale of the securities offered pursuant to this prospectus, we will set forth their names and describe their compensation in a prospectus supplement. We provide further information regarding how we or the selling stockholders will sell our respective securities in the Plan of Distribution section beginning on page

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 December 19, 2012 was \$3.61.

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 December 26, 2012

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You should rely only on the information contained in or incorporated by reference in this prospectus. We nor the selling stockholders have authorized anyone to provide you with different information. Neither we nor the selling stockholders are 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.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf registration process, we or the selling stockholders may, from time to time, sell in one or more offerings any combination of the securities described in this prospectus.

This prospectus provides you with a general description of the securities that we may issue. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. Such prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus and the applicable prospectus supplement together with the additional information described under the heading. Where You Can Find More Information. We may also prepare free writing prospectuses that describe particular securities. Any free writing prospectus should also be read in connection with this prospectus and with any prospectus supplement referred to therein. For purposes of this prospectus, any reference to an applicable prospectus supplement may also refer to a free writing prospectus, unless the context otherwise requires.

When we refer to Research Frontiers, our company, we, our and us in this prospectus, we mean Research Frontiers Incorporated and its subsidiaries unless the context indicates otherwise. When we refer to selling stockholders, we mean the stockholders named in the Selling Stockholders section of this prospectus.

The registration statement that contains this prospectus, including the exhibits to the registration statement, contains additional information about us and the securities offered under this prospectus. That registration statement can be read at the SEC s website or at the SEC s offices mentioned under the heading Where You Can Find More Information.

The following trademarks are property of Research Frontiers: SPD-Smart , SPD-SmartGlass , VaryFast , SPD-CleanTech , SPD Clean Technology , SmartGlass , The View of the Future - Everywhere you Look , Powered by SPD , Powered by SPD-CleanTech , Powered by SPD Clean Technology , SG Enabled , SPD Green and Clean , SPD On-Board , Speed Matters , and Visit SmartGlass.com - to change your view of the world . Other trademarks appearing in this prospectus and the documents incorporated by reference herein and therein are property of their respective owners.

This prospectus and the documents incorporated by reference may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate, or imply future results, performance, or achievements, and may contain the words believe, anticipate, expect, estimate, project, will be, will continue, or words or phrases of similar meaning. Forward-looking statements inherently involve risks and uncertainties that may cause actual results to differ materially from the forward-looking statements (Cautionary Statements). The risks and uncertainties include, but are not limited to, those matters addressed in this prospectus under the Risk Factors section and elsewhere in this prospectus and in the incorporated documents. Such developments could have a material adverse impact on our financial position and our results of operations. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the Cautionary Statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

The distribution of this prospectus and the applicable prospectus supplement and the offering of the securities in certain jurisdictions may be restricted by law. Persons into whose possession this prospectus and the applicable prospectus supplement come should inform themselves about and observe any such restrictions. This prospectus and the applicable prospectus supplement do not constitute, and may not be used in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make such offer or solicitation.

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PROSPECTUS SUMMARY

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).

Issuance of Stock and Warrants to Selling Stockholders

On October 2, 2012, we entered into a Common Stock and Warrant Purchase Agreement with the selling stockholders named in this prospectus, pursuant to which they purchased an aggregate 1,250,000 shares of common stock and 250,000 warrants to purchase common stock. Each share and corresponding warrant were sold at an aggregate price of \$4.49, resulting in gross proceeds to us of approximately \$5,612,500. The warrants may be exercised at anytime from April 8, 2013 to April 8, 2018, at an exercise price of \$6.73 per share. The transaction closed on October 9, 2012. The securities issued in this private placement were not registered under the Securities Act or any state securities laws and were issued and sold in the private placement pursuant to Regulation D of the Securities Act. Pursuant to the registration rights granted to the selling stockholders under the purchase agreement, we are registering the securities issued to the selling stockholders in the private placement. The issuance of shares underlying the 250,000 warrants sold in the October 2012 private placement will also be issued pursuant to Regulation D of the Securities Act to the extent that those sales of underlying common stock are to holders of the warrants who acquired the warrants in unregistered transactions. The registration of the offer and sale of shares underlying the 250,000 warrants is limited to transferees of the warrants who acquire those securities in registered transactions following the effective date of this registration statement.

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 September 30, 2012, we had approximately \$8.0 million in cash and cash equivalents. 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 September 30, 2012, we had an accumulative deficit of \$86,867,621. Our net loss was \$4,134,068 in 2011, \$3,874,865 in 2010 and \$4,002,761 in 2009 and \$2,459,335 for the nine months ended September 30, 2012 (which includes non-cash compensation expense in 2011, 2010 and 2009 of \$702,837, \$772,604 and \$445,913, respectively, and in the nine months ended September 30, 2012 of \$788,000).

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 or market products using SPD technology and depend upon activities by our licensees and their customers.

We depend upon the activities of our licensees in order to be profitable. We do not directly manufacture or market products using SPD technology. 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 39 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 our 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.

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.

While our common stock is listed on the Nasdaq Capital Market and has recently experienced increased trading volume, our common stock 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 2012 through December 19, 2012 was approximately 40,325 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, 2011, we had a net operating loss carryforward for federal income tax purposes of \$55 million, varying amounts of which will expire in each year from 2012 through 2031. 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;

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- 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.

There is currently no established trading market for the warrants and we do not expect that one will develop.

The warrants registered hereunder will not be listed on the Nasdaq Capital Market or any other securities exchange and there is currently no established trading market for the warrants. We do not intend to make a market in the warrants and do not expect that one will develop. Therefore, you may have to hold the warrants you purchase in this offering until such time, if any, as you wish to exercise the warrants or we redeem them.

There must be a current prospectus and state registration in order for you to exercise the warrants.

Purchasers of the common stock and warrants offered by us will be able to exercise the warrants only if a current prospectus relating to the common stock underlying the warrants is then in effect and only if such securities are qualified for sale or exempt from qualification under the applicable securities laws of the states in which the various holders of warrants reside. Although we will attempt to maintain the effectiveness of a current prospectus covering the common stock underlying the warrants, there can be no assurance that we will be able to do so. We will be unable to issue common stock to those persons desiring to exercise their warrants if a current prospectus covering the common stock issuable upon the exercise of the warrants is not kept effective or if such shares are neither qualified nor exempt from qualification in the states in which the holders of the warrants reside.

DIVIDENDS

We have never paid any cash dividends and do 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. We will not receive any proceeds from the sale of our securities offered by the selling stockholders.

DESCRIPTION OF COMMON STOCK

General

We can issue 100,000,000 shares of common stock, \$0.0001 par value per share. As of December 18, 2012, 22,646,782 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.

Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Certificate of Incorporation and Bylaws

Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws 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.

Delaware Law

We are also subject to Section 203 of the Delaware General Corporation Law, which in general 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:

- prior to that date, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by (i) persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to that date, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 % of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines an interested stockholder as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

The above-summarized provisions of the Delaware General Corporation Law and our certificate of incorporation and bylaws could make it more difficult to acquire us by means of a tender offer, a proxy contest or otherwise, or to remove incumbent officers and directors. These provisions are expected to discourage certain types of coercive takeover practices and takeover bids that our board of directors may consider inadequate and to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms.

Stockholders Rights Plan

In February 2003, our board of directors adopted a Stockholders Rights Plan, or the Rights Plan, and declared a dividend distribution of one right, or a Right, for each outstanding share of our common stock to stockholders of record at the close of business on March 3, 2003. Subject to certain exceptions listed in the Rights Plan, if a person or group has acquired beneficial ownership of, or commences a tender or exchange offer for, 15% or more of the our common stock, unless redeemed by our board of directors, each Right entitles the holder (other than the acquiring person) to purchase from us \$120 worth of common stock for \$60. If we are merged into, or 50% or more of its assets or earning power is sold to, the acquiring company, the Rights will also enable the holder (other than the acquiring person) to purchase \$120 worth of common stock of the acquiring company for \$60. The Rights will expire at the close of business on February 18, 2013, unless the Rights Plan is extended by our board of directors or unless the Rights are earlier redeemed by us at a price of \$.0001 per Right. The Rights are not exercisable during the time when they are redeemable by us. The above description highlights some of the features of the Company s Rights Plan and is not a complete description of the Rights Plan. A more detailed description and copy of the Rights Plan has been filed with the SEC and is available from us upon request.

Registration Rights

On October 2, 2012, we entered into a Common Stock and Warrant Purchase Agreement with the selling stockholders, which required us to file with the SEC, this registration statement on Form S-3 to register the securities sold to the selling stockholders, including the common stock, the warrants, and the common stock issuable upon exercise of the warrants. The registration of the offer and sale of shares underlying the 250,000 warrants is limited to transferees of the warrants who acquire those securities in registered transactions following the effective date of this registration statement.

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.

Disclosure of SEC Position on Indemnification for Securities Act Liabilities

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, officers, and persons controlling our company, we understand that it is the SEC s opinion that such indemnification is against public policy as expressed in the Securities Act and may therefore be unenforceable.

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.

DESCRIPTION OF SELLING STOCKHOLDER WARRANTS

The warrants offered by the selling stockholders will entitle the holder to purchase one share of our common stock at an exercise price of \$6.73 per share. Holders of the warrants may exercise the warrants at any time from April 8, 2013 to 4:30 P.M. Woodbury, New York time on April 8, 2018, after which 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 cash 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.

The warrants provide that the holder may not exercise the warrant to the extent that such exercise will cause the holder to beneficially own more than 14.999% of the common stock of the company then issued and outstanding. This restriction may not be waived.

The exercise price and the number and type of securities purchasable upon exercise of warrants are subject to adjustment upon certain corporate events, including certain combinations, consolidations, liquidations, mergers, recapitalizations, reclassifications, reorganizations, stock dividends and stock splits, a sale of all or substantially all of our assets and certain other events.

No fractional warrant shares will be issued upon exercise of the warrants. The holders will be entitled to participate in any dividends or other distributions paid, or rights offered, to holders of our common stock on an as-exercised basis.

SELLING STOCKHOLDERS

We are registering for resale shares of common stock of the selling stockholders, warrants offered by the selling stockholders, and shares of common stock issuable upon exercise of the warrants held by the selling stockholders. The securities offered by the selling stockholders were acquired on October 9, 2012 in a private placement pursuant to the Common Stock and Warrant Purchase Agreement between us and the selling stockholders named below. Each share and corresponding warrant was sold at an aggregate price of \$4.49. The warrants are exercisable from April 8, 2013 until April 8, 2018 at an exercise price of \$6.73 per share. The shares of common stock being offered by the selling stockholders are those purchased pursuant to the purchase agreement described above and those issuable to the selling stockholders upon exercise of the warrants. The issuance of shares underlying the 250,000 warrants sold in the October 2012 private placement will also be issued pursuant to Regulation D of the Securities Act to the extent that those sales of underlying common stock are to holders of the warrants who acquired the warrants in unregistered transactions. The registration of the offer and sale of shares underlying the 250,000 warrants is limited to transferees of the warrants who acquire those securities in registered transactions following the effective date of this registration statement. Except for the ownership of securities described below, the selling stockholders have not had any material relationship with us in the past three years. Unless the context otherwise requires, as used in this prospectus, selling stockholders includes the selling stockholders named in the table below and donees, pledgees, transferees or other successors-in-interest selling shares received from the selling stockholders as a gift, pledge, partnership distribution or other transfer after the date of this prospectus.

The table below sets forth information regarding the beneficial ownership of our common stock by the selling stockholders as of October 25, 2012. The information regarding the selling stockholders beneficial ownership after the sales made pursuant to this prospectus assumes that all of the common stock subject to sale pursuant to this prospectus will have been sold. The common stock and warrants subject to sale by the selling stockholders pursuant to this prospectus may be offered from time to time, in whole or in part, by the selling stockholders.

| | · | | Shares Subject to Sale Pursuant to this Prospectus | Owned After Sale of A Subject to Sal | Shares Beneficially Owned After Sale of All Shares Subject to Sale Pursuant to this Prospectus | |
|---|--|--|---|---|--|--|
| Name | Number | Percent | Number | Number | Percent | |
| Douglas Family TR u/a dtd 1/29/90 | | | | | | |
| James & Jean Douglas TTEES (1) | 430,840 | 1.9% | 250,000 | 180,840 | * | |
| K&M Douglas TR u/a dtd 3/23/06 Kevin & Michelle Douglas TTEES ⁽²⁾ | 646,260 | 2.9% | 375,000 | 271,260 | 1.2% | |
| Douglas Irrev Descendants TR u/a dtd 8/7/98 Kevin & Michelle Douglas TTEES ⁽³⁾ | 1,077,099 | 4.8% | 625,000 | 452,099 | 2.0% | |
| Douglas TTEES | 1,077,099 | 4.8% | 023,000 | 432,099 | 2.0% | |
| * (1) | James Douglas an 1/29/90 (Dougla ownership of the | hares subjected Jean Doughs Family Trescurities over the securities of the securitie | et to outstanding warrants glas serve as trustees of t ust) and may be deeme wned directly by Douglas rust is 125 E. Sir Francis | he Douglas Fami d to have indirect Family Trust. Th | ly TR u/a dtd beneficial ne business | |
| (2) | Includes 15,000 shares subject to outstanding warrants exercisable within 60 days. Kevin Douglas and Michelle Douglas serve as trustees for the K&M Douglas TR u/a dtd 3/23/06 TTEES (K&M Douglas Trust) and may be deemed to have indirect beneficial ownership of the securities owned directly by the K&M Douglas Trust. The business address for the K&M Douglas Trust is 125 E. Sir Francis Dr. Boulevard, Suite 400, Larkspur, California 94939. | | | | | |
| (3) | Kevin Douglas an Descendants TR u deemed to have in | nd Michelle 1/a dtd 8/7/9 ndirect bene | t to outstanding warrants Douglas serve as trustees 8 TTEES (the Douglas ficial ownership of the se | for the Douglas Irrevocable Trus curities owned di | Irrev t) and may be | |

As indicated above, the selling stockholders own warrants to purchase our common stock, which were issued pursuant to the October 2012 private placement, but such warrants are not exercisable until April 8, 2013. The Douglas Family Trust owns warrants to purchase 50,000 shares of our common stock, the K&M Douglas Trust owns warrants to purchase 75,000 shares of our common stock, and the Douglas Irrevocable Trust owns warrants to purchase 125,000 shares of our common stock.

Douglas Irrevocable Trust. The business address for Douglas Irrevocable Trust is 125

E. Sir Francis Dr. Boulevard Suite 400, Larkspur, California 94939.

PLAN OF DISTRIBUTION

We are registering 3,000,000 shares of our common stock and warrants to purchase our common stock. We are also registering for resale by the selling stockholders and certain transferees a total of 1,250,000 shares of our common stock, 250,000 warrants to purchase common stock, and 250,000 shares of our common stock issuable upon exercise of the warrants held by the selling stockholders. The registration of the offer and sale of shares underlying the 250,000 warrants is limited to transferees of the warrants who acquire those securities in registered transactions following the effective date of this registration statement. The issuance of shares underlying the 250,000 warrants sold in our October 2012 private placement will be issued pursuant to Regulation D of the Securities Act to the extent that those sales of underlying common stock are to holders of the warrants who acquired the warrants in unregistered transactions.

We will not receive any of the proceeds from the sale by the selling stockholders of the securities, although we will receive the proceeds from the exercise of the warrants by the selling stockholders. We will bear all fees and expenses incident to our obligation to register the securities. If the securities are sold through broker-dealers or agents, the selling stockholder will be responsible for any compensation to such broker-dealers or agents. The selling stockholders may pledge or grant a security interest in some or all of the securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the securities from time to time pursuant to this prospectus. The selling stockholders also may transfer and donate the securities in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

We or the selling stockholders 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;
- in privately negotiated transactions;
- in underwritten transactions;
- in ordinary brokerage transactions and transactions in which the broker solicits; or
- through a combination of such methods.

The offering price of the securities from time to time will be determined by us or the selling stockholders, as applicable, and the price may be at the market price of our common stock on the Nasdaq Capital Market or any other exchange or market at the time of such sale, at negotiated prices, at fixed prices or at carrying prices determined at the time of sale;

Some or all of the securities may be sold through one or more broker-dealers or agents and may involve crosses, block transactions or hedging transactions. We or the selling stockholders may enter into hedging transactions with broker-dealers or agents, which may in turn engage in short sales of the common stock in the course of hedging in positions they assume. We or the selling stockholders may also sell securities short and deliver securities to close out short positions or loan or pledge securities to broker-dealers or agents that in turn may sell such securities. In connection with such sales through one or more broker-dealers or agents, such broker-dealers or agents may receive compensation in the form of discounts, concessions or commissions from us or the selling stockholders and may receive commissions from the purchasers of the securities for whom they act as broker-dealer or agent or to whom they sell as principal. Any underwriters, dealers or agents participating in a distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any profit on the sale of the securities and any commissions received by broker-dealers may be deemed to be underwriting commissions under the Securities Act. The maximum compensation to be received by any member of the Financial Industry Regulatory Authority, Inc. in connection with any distribution of securities we are registering will not exceed 8% of the proceeds from any sale of such securities.

We have not, and the selling stockholders have advised us that they have not, entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of securities. Upon entering into, or upon notification by the selling stockholders that they have entered into, any material arrangement with an underwriter or broker-dealer for the sale of securities through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file a prospectus supplement, if required, pursuant to Rule 424(b) under the Securities Act, disclosing certain material information, including:

- the name of the applicable seller;
- the type and number of securities being offered;
- the terms of the offering;
- the proceeds we will receive from the sale;
- the names of the participating underwriters, broker-dealers or agents;
- any discounts, commissions or other compensation paid to underwriters or broker-dealers and any discounts, commissions or concessions allowed or reallowed or paid by any underwriters to dealers;
- any over-allotment options under which underwriters may purchase additional securities from us;
- the public offering price;
- any securities exchanges on which the securities may be listed if it is other than the Nasdaq Capital Market; and
- other material terms of the offering.

Under the securities laws of some states, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with. There can be no assurance that we or any selling stockholder will sell any or all of the securities registered pursuant to the shelf registration statement, of which this prospectus forms a part.

We or the selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the securities by the us, the selling stockholders, and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities with respect to the securities. All of the foregoing may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities with respect to the securities.

We will bear all expenses of the registration of the securities including, without limitation, SEC filing fees and expenses of compliance with the state securities of blue sky laws. The selling stockholders will pay all underwriting discounts and selling commissions and expenses, brokerage fees and transfer taxes, as well as the fees and disbursements of counsel to and experts for the selling stockholders, if any. We or the selling stockholders may agree to indemnify an underwriter, broker-dealer, or agent against certain liabilities related to the selling of the securities, including liabilities arising under the Securities Act. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement or the selling stockholder will be entitled to contribution. We will be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholders for use in this prospectus, in accordance with the related securities purchase agreement or will be entitled to contribution. Once sold under this shelf registration statement, of which this prospectus forms a part, the securities will be freely tradable in the hands of persons other than our affiliates.

Any securities covered by this prospectus that qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus.

EXPERTS

The financial statements and schedule of Research Frontiers as of December 31, 2011 and 2010, and for each of the three years in the period ended December 31, 2011, and management s assessment of the effectiveness over internal controls as of December 31, 2011, incorporated by reference into this prospectus have been so incorporated in reliance upon the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in accounting and auditing.

LEGAL MATTERS

The legality of the securities offered hereby has been passed upon by the law firm of Faegre Baker Daniels LLP, Minneapolis, Minnesota.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requests of the Exchange Act and file reports, proxy statements and other information with the SEC. 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 the company, which are filed electronically with the SEC. Additional information about us can also be found at our website at http://www.SmartGlass.com. The information on, or that may be accessed through, our web site is not incorporated by reference into and should not be considered a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

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, 2011;
- the portions of the proxy statement dated April 25, 2012 for our annual meeting of stockholders held on June 14, 2012 that have been incorporated by reference into our report on Form 10-K for the fiscal year ended December 31, 2011;
- quarterly reports on Form 10-Q for the fiscal quarters ended March 31, 2012, June 30, 2012, and September 30, 2012;
- current reports on Form 8-K filed with the SEC on June 18, 2012, August 2, 2012, August 28, 2012, and October 5, 2012;
- 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 and February 24, 2003.

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 securities offered under this prospectus shall be deemed to be incorporated by reference into this prospectus (except for information furnished and not filed with the SEC in a Current Report on Form 8-K).

We will provide without charge to each person, including a beneficial owner, to whom this prospectus is delivered upon written or oral request, 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).

750,000 Shares of Common Stock

Research Frontiers Incorporated

PROSPECTUS SUPPLEMENT

Craig-Hallum Capital Group

May 8, 2014