INTERLEUKIN GENETICS INC Form S-1 July 01, 2013

As filed with the Securities and Exchange Commission on July 1, 2013

Registration Statement No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

under the

SECURITIES ACT OF 1933

INTERLEUKIN GENETICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware283594-3123681(State or other jurisdiction of incorporation or organization)(Primary Standard Industrial organization)(I.R.S. EmployerClassification Code Number)Identification Number)

135 Beaver Street

Waltham, Massachusetts 02452

(781) 398-0700

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Kenneth S. Kornman
Chief Executive Officer
Interleukin Genetics, Inc.
135 Beaver Street
Waltham, Massachusetts 02452
(781) 398-0700
(Name, address, including zip code, and telephone number, including area code, of agent for service)
Copies to:
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Approximate date of commencement of proposed sale to the public : From time to time after this registration statement becomes effective.
If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. x
If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

offering. "

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

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

Large accelerated filer " Accelerated filer " Accelerated filer " Non-accelerated filer " (Do not check if a smaller reporting company) Smaller reporting company \mathbf{x}

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price per Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.001 per share	120,408,197	\$0.465	\$55,989,812	\$7,637

All of the shares of common stock offered hereby are for the account of selling stockholders and consist of 85,326,230 issued and outstanding shares and 35,081,967 shares issuable upon the exercise of warrants. Pursuant

- (1) to Rule 416 of the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional shares of common stock which become issuable by reason of any share dividend, share split, recapitalization or any other similar transaction without receipt of consideration which results in an increase in the number of shares or common stock outstanding.
 - Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities
- (2) Act based upon the average of the high and low prices for the common stock on June 25, 2013, as reported on the OTCOB.

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

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SECURITY HOLDERS IDENTIFIED IN THIS PROSPECTUS MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED JULY 1, 2013

PRELIMINARY PROSPECTUS

120,408,197 SHARES OF COMMON STOCK

This prospectus relates to the resale, from time to time, by the selling stockholders named in this prospectus or their pledgees, donees, transferees, or other successors in interest of up to 120,408,197 shares of our common stock. These shares consist of 85,326,230 issued and outstanding shares and 35,081,967 shares underlying warrants. These shares and warrants were issued in connection with a private placement completed on May 17, 2013 and consist of (1) 43,715,847 shares and 32,786,885 shares underlying warrants issued to the investors in the private placement, (2) 28,160,200 shares issued to Pyxis Innovations Inc. upon conversion of 5,000,000 shares of our Series A-1 Convertible Preferred Stock immediately prior to the private placement, (3) 2,521,222 shares issued to Pyxis upon conversion of \$14,316,255 in principal amount of convertible debt immediately prior to the private placement, (4) 10,928,961 shares issued to Delta Dental Plan of Michigan, Inc. upon conversion of 500,000 shares of our Series B Convertible Preferred Stock immediately prior to the private placement, and (5) 2,295,082 shares underlying warrants issued to BTIG, LLC, the placement agent in the private placement, and its affiliates, as placement agent compensation.

Our common stock is traded on the OTCQB under the symbol "ILIU". On June 28, 2013, the closing sale price of our common stock on the OTCQB was \$0.42 per share.

The selling stockholders may offer and sell any of the shares from time to time at fixed prices, at market prices or at negotiated prices, and may engage a broker, dealer or underwriter to sell the shares. For additional information on the possible methods of sale that may be used by the selling stockholders, you should refer to the section entitled "Plan of Distribution" elsewhere in this prospectus. We will not receive any proceeds from the sale of any shares by the selling

stockholders. We may, however, receive the proceeds of any cash exercises of warrants. We do not know when or in what amount the selling stockholders may offer the shares for sale. The selling stockholders may sell any, all or none of the shares offered by this prospectus.
AN INVESTMENT IN OUR COMMON STOCK INVOLVES RISKS. SEE THE
SECTION ENTITLED "RISK FACTORS" BEGINNING ON PAGE 4.
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.
The date of this prospectus is , 2013

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You should read this prospectus, any applicable prospectus supplement and the information incorporated by reference in this prospectus before making an investment in the securities of Interleukin Genetics, Inc. See "Where You Can Find More Information" on page 14 for more information. You should rely only on the information contained in or incorporated by reference in this prospectus or a prospectus supplement. The Company has not authorized anyone to provide you with different information. This document may be used only in jurisdictions where offers and sales of these securities are permitted. You should assume that information contained in this prospectus, or in any document incorporated by reference, is accurate only as of any date on the front cover of the applicable document. Our business, financial condition, results of operations and prospects may have changed since that date. Unless otherwise noted in this prospectus, "Interleukin Genetics," "Interleukin," "the Company," "we," "us," "our" and similar terms refer to Interleukin Genetics, Inc.

PROSPECTUS SUMMARY

This summary highlights some information from this prospectus. It may not contain all the information important to making an investment decision. You should read the following summary together with the more detailed information regarding our Company and the securities being sold in this offering, including "Risk Factors" and other information incorporated by reference herein.

Overview

Interleukin Genetics, Inc. is a personalized health company that develops unique genetic tests to provide information to better manage health and specific health risks. Our overall mission is to provide genetic testing services to empower individuals, physicians and dentists to better guide lifestyle and treatment options that can help individuals maintain or improve their health. We believe that our proprietary genetic tests can help our commercial distribution partners provide improved services to their customers, empower individuals to personalize their health, and assist pharmaceutical companies to improve drug development and use by identifying subpopulations that are more responsive to a therapy. Our business focuses on personalized health, by providing genetic tests with strong clinical value. Our tests are made available via marketing partners or directly to end users. We have patents covering the use of certain gene variations and specific combinations of gene variations for a number of common chronic diseases and conditions.

Until recently, scientific study of chronic health conditions has largely focused on identifying initiating factors that are causative and ways to alter or reverse the cause or condition. Common examples of altering or reversing initiating factors include calorie reduction in the case of being overweight, reducing levels of cholesterol in the case of heart disease, elimination of bacteria in the case of periodontal disease and increasing estrogen levels in the case of osteoporosis. However, it is now well established that while intiating factors are essential for disease, the mere presence of such factors does not necessarily determine whether a single individual will develop an illness, have mild or severe disease, or respond the same way as everyone else. Many common conditions arise in part as a result of how our bodies respond and interact with various environmental factors.

Our Products

Our genetic tests that are currently being commercialized are:

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PST[®]: This genetic test analyzes genetic variations associated with inflammation and identifies individuals who are at increased risk for more severe periodontal disease.

Weight Management Genetic Test: This test determines whether a low fat, low carbohydrate or balanced diet may be best and whether normal or vigorous exercise is needed to most efficiently lose existing body fat. This test is marketed under our Inherent Health® brand.

Bone Health Genetic Test: This test is designed to identify whether an individual is more likely to be susceptible to spine fractures and low bone mineral density associated with osteoporosis. This test is marketed under our Inherent Health® brand.

Heart Health Genetic Test: This test is designed to identify genetic predisposition to excess inflammation, which is a risk factor for heart attack. This test is marketed under our Inherent Health® brand.

Wellness Select Genetic Test: This allows buyers to purchase any combination of Inherent Health® genetic tests at a discounted price. This is marketed under our Inherent Health® brand.

In February 2013, we entered into a Preferred Participation Agreement with Renaissance Health Services Corporation, or RHSC, the exclusive distributor of the Delta Dental brand in eight states, with respect to reimbursement of our PST® test. We market our Inherent Health® brand of genetic assessment tests primarily through our Merchant Network and Channel Partner Agreement with Alticor's Amway Global Company.

In addition to the genetic tests listed above that we are currently marketing, we are also focusing our genetic test development efforts on the development of an Osteoarthritis, or OA, genetic test to identify individuals at increased risk for severe OA.

Business Strategy
Our revenue model consists of:
sales of our Inherent Health® brand of genetic tests either directly to end users or through partnerships such as the Amway Global channel;
sales of our Inherent Health® brand of genetic tests to commercial distribution partners such as regional weight loss centers;
sales of our PST® genetic tests to insurance providers; and
· license fees for intellectual property used in the sale of partner genetic tests.
Our primary business focus and strategy is to continue our commercialization efforts with our PST® genetic test. In addition, we plan to continue to develop and sell tests for our own business needs under the Inherent Health® brand.
We market our Inherent Health® brand of genetic assessment tests primarily through our Merchant Network and Channel Partner Agreement with Alticor's Amway Global Company. Under this agreement, Amway Global's independent business owners, or IBOs, are able to purchase the Inherent Health® brand of genetic tests via a hyperlink from the Amway Global website to the Inherent Health® website. We believe our proprietary genetic test brands support the efforts of Amway Global to develop personalized consumer products for their IBOs' customers. Sales with Amway Global through this business arrangement began in December 2009.
Recent Developments
The Private Placement
On May 17, 2013, we entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with various accredited investors (the "Purchasers"), pursuant to which we sold securities to the Purchasers in a private placement

transaction (the "Private Placement"). In the Private Placement, we sold an aggregate of 43,715,847 shares of our common stock at a price of \$0.2745 per share for gross proceeds of \$12,000,000. The Purchasers also received

warrants to purchase up to an aggregate of 32,786,885 shares of common stock an exercise price of \$0.2745 per share (the "Warrants"). The Warrants have a term of seven years from the date they become exercisable. Sixty-three percent of the shares issuable pursuant to the Warrants were exercisable immediately upon issuance, and the remaining 37% become exercisable following the Share Authorization Increase (as defined below).

In addition, pursuant to the Purchase Agreement, each Purchaser has the right, at any time and from time to time following the date of shareholder approval of an amendment to our Certificate of Incorporation to increase the number of authorized shares of common stock from 150,000,000 shares to 300,000,000 shares (the "Share Authorization Increase") and on or before June 30, 2014 (the "Expiration Date"), to purchase at one or more subsequent closings its pro rata share of up to an aggregate of 18,214,936 additional shares of common stock at a purchase price of \$0.2745 per share and warrants to purchase up to an aggregate of 13,661,201 shares of common stock at an exercise price of \$0.2745 per share (the "Additional Investment"). If, prior to the Expiration Date, Purchasers have not purchased their entire pro rata share of the Additional Investment, Purchasers who have purchased their entire pro rata share of the Additional Investment, will be entitled to purchase the unsold portion of the Additional Investment.

Immediately prior to the closing of the Private Placement, and in accordance with the terms of the Purchase Agreement: (i) Pyxis Innovations Inc. ("Pyxis"), the sole holder of our outstanding Series A-1 Convertible Preferred Stock converted all 5,000,000 shares of outstanding Series A-1 stock into 28,160,200 shares of our common stock (the "Series A-1 Conversion"); (ii) Pyxis, the sole holder of our outstanding convertible debt, converted all of the principal amount of debt outstanding (\$14,316,255) into 2,521,222 shares of our common stock (the "Debt Conversion"); and (iii) Delta Dental Plan of Michigan, Inc. ("DDMI"), the sole holder of our outstanding Series B Convertible Preferred Stock converted all 500,000 outstanding shares of Series B stock into 10,928,961 shares of common stock (the "Series B Conversion").

For its services as exclusive placement agent in the Private Placement, BTIG, LLC ("BTIG") received cash compensation in the amount of approximately \$780,000 and BTIG and an affiliate received warrants to purchase an aggregate of 2,295,082 shares of our common stock, at an exercise price of \$0.2745 per share (the "BTIG Warrants"). The BTIG Warrants have a term of seven years from the date they become exercisable.

In connection with the Private Placement, we also entered into a Registration Rights Agreement with the Purchasers, Pyxis, DDMI and BTIG, pursuant to which we are required to file a registration statement on Form S-1 within 45 days of May 17, 2013 to cover the resale of (i) the shares sold in the Private Placement and the shares of common stock underlying the Warrants issued in the Private Placement, (ii) the shares of common stock issued to Pyxis pursuant to the Series A-1 Conversion and the Debt Conversion, (iii) the shares of common stock issued to DDMI pursuant to the Series B Conversion, and (iv) the shares of common stock underlying the BTIG Warrants. In addition, within 45 days following the Expiration Date, we will be required to file a registration statement to cover the resale of (i) any shares of common stock sold to the Purchasers pursuant to the Additional Investment and the shares of common stock underlying any warrants issued pursuant to the Additional Investment, and (ii) shares of common stock underlying any additional warrants issued to BTIG as placement agent compensation in connection with the Additional Investment. The failure on the part of Interleukin to satisfy certain deadlines described in the Registration Rights Agreement may subject us to payment of certain monetary penalties.

Additional Information

For additional information related to our business and operations, please refer to the reports incorporated herein by reference, including our Annual Report on Form 10-K for the year ended December 31, 2012 and our Ouarterly Report on Form 10-Q for the quarter ended March 31, 2013, as described under the caption "Incorporation of Documents by Reference."

Corporate Information

Our executive offices are located at 135 Beaver Street, Waltham, Massachusetts 02452, and our telephone number is (781) 398-0700. We were incorporated in Texas in 1986 and we re-incorporated in Delaware in March 2000. We maintain websites at www.ilgenetics.com and www.inherenthealth.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-O, Current Reports on Form 8-K, and all amendments to such reports are available to you free of charge through the Investor Relations Section of www.ilgenetics.com as soon as practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission. The information contained on our websites are not incorporated by reference into this prospectus. We have included our website addresses only as an inactive textual reference and do not intend them to be active links to our websites.

We are a "smaller reporting company" as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and have elected to take advantage of certain of the scaled disclosure available to smaller reporting companies.

The Offering

Common stock

offered by the Up to 120,408,197 shares of common stock, consisting of 85,326,230 issued and outstanding shares and 35,081,967 shares underlying Warrants. selling

stockholders

We will not receive any proceeds from the sale of the shares offered by this prospectus. We may, however, receive the proceeds of any cash exercises of Warrants which, if received, would be used Use of proceeds

by us for working capital purposes.

OTCQB trading ШШ symbol

RISK FACTORS

A purchase of shares of our common stock is an investment in our securities and involves a high degree of risk. You should carefully consider the risks and uncertainties and all other information contained in or incorporated by reference in this prospectus, including the risks and uncertainties discussed under "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2012. All of these risk factors are incorporated by reference herein in their entirety. If any of these risks actually occur, our business, financial condition and results of operations would likely suffer. In that case, the market price of the common stock could decline, and you may lose part or all of your investment in our company. Additional risks of which we are not presently aware or that we currently believe are immaterial may also harm our business and results of operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, or Exchange Act, regarding our strategy, future, operations, future financial position, future revenues, projected costs, and plans and objectives of management. You can identify these forward-looking statements by their use of words such as "anticipate," "believe," "estimate," "expect," "intend," "may," "plan, "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions. You also can identify the fact that they do not relate strictly to historical or current facts. There are a number of important risks and uncertainties that could cause our actual results to differ materially from those indicated by forward-looking statements. For a description of these risks and uncertainties, please refer to the section entitled "Risk Factors," any other risk factors set forth in any information incorporated by reference in this prospectus, as well as any other risk factors and cautionary statements we include or incorporate by reference into this prospectus in the future. While we may elect to update forward-looking statements wherever they appear in this prospectus or in the documents incorporated by reference in this prospectus, we do not assume, and specifically disclaim, any obligation to do so, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

The shares of common stock being offered by this prospectus are solely for the account of the selling stockholders. We will not receive any proceeds from the sale of these shares by the selling stockholders. We may, however, receive the proceeds of any cash exercises of Warrants which, if received, would be used by us for working capital purposes.

MARKET FOR OUR COMMON STOCK

Market Information

Our common stock currently trades under the symbol "ILIU" on the OTCQB. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock, as reported by the OTCQB.

	High	Low
2013:		
First Quarter	\$0.52	\$0.23
Second Quarter	\$0.55	\$0.345
2012:		
First Quarter	\$0.35	\$0.17
Second Quarter	\$0.33	\$0.23
Third Quarter	\$0.55	\$0.28
Fourth Quarter	\$0.46	\$0.26
2011:		
First Quarter	\$0.41	\$0.27
Second Quarter	\$0.47	\$0.31
Third Quarter	\$0.49	\$0.20
Fourth Quarter	\$0.35	\$0.17

Stockholders

As of June 25, 2013, there were approximately 125 stockholders of record and according to our estimate, approximately 3,300 beneficial owners of our common stock.

DIVIDEND POLICY

We have never paid dividends to our stockholders. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future.

SELLING STOCKHOLDERS

This prospectus covers the resale from time to time by the selling stockholders in the table below of:

·43,715,847 shares and 32,786,885 shares underlying the Warrants issued to the Purchasers in the Private Placement;

28,160,200 shares issued to Pyxis pursuant to the Series A-1 Conversion;

2,521,222 shares issued to Pyxis pursuant to the Debt Conversion;

10,928,961 shares issued to DDMI pursuant to the Series B Conversion; and

2,295,082 shares underlying the BTIG Warrants

Pursuant to the Registration Rights Agreement executed in connection with the Private Placement, we have filed with the SEC a registration statement on Form S-1, of which this prospectus forms a part, under the Securities Act of 1933, as amended, or the Securities Act, to register these resales. The selling stockholders identified in the table below may from time to time offer and sell under this prospectus any or all of the shares of our common stock described under the column "Number of Shares Offered Hereby" in the table below.

The table below has been prepared based upon the information furnished to us by the selling stockholders. The selling stockholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the following table is presented in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly.

Any selling stockholders who are affiliates of broker-dealers and any participating broker-dealers are deemed to be "underwriters" within the meaning of the Securities Act, and any commissions or discounts given to any such selling stockholder or broker-dealer may be regarded as underwriting commissions or discounts under the Securities Act. The selling stockholders have informed us that they do not have any agreement or understanding, directly or indirectly, with any person to distribute their shares of common stock.

The following table sets forth the name of each selling stockholder and the number of shares of our common stock beneficially owned by the stockholder before this offering. The number of shares disclosed in the table below as beneficially owned are those beneficially owned as determined under the rules of the SEC. Such information is not necessarily indicative of ownership for any other purpose. Under the rules of the SEC, a person is deemed to be a beneficial owner of a security if that person has or shares voting power, which includes the power to vote or to direct the voting of such security, or investment power, which includes the power to dispose of or to direct the disposition of such security. In computing the number of shares beneficially owned by a selling stockholder and the percentage of ownership of that selling stockholder, shares underlying options or warrants (including the Warrants issued in the Private Placement) held by that selling stockholder that are convertible or exercisable, as the case may be, within 60 days of June 1, 2013 are included. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other selling stockholder. Each selling stockholder's percentage of ownership in the following table is based upon 122,140,718 shares of our common stock outstanding as of June 1, 2013.

Except as noted below, none of the selling stockholders held any position or office or had any other material relationship with us or with any of our predecessors or affiliates within the past three years.

	Shares Beneficially C Prior to the Offering (1)	Owned	Number of	Shares Beneficially Following th Offering (1)	
Name	Number of Shares	Percent (%)	Shares Offered Hereby	Number of Shares	Percent (%)
Bay City Capital Fund V, L.P. (2) 750 Battery Street, Suite 400 San Francisco, CA 94111	35,328,062	25.7 %	·	0	-
Bay City Capital Fund V Co-Investment Fund, L.P. (3) 750 Battery Street, Suite 400 San Francisco, CA 94111	673,223	*	673,223	0	-

	Shares Beneficially Owned Prior to the Offering (1)		Number of	Shares Beneficially Offering (1)	
Name	Number of Shares	Percent (%)	Shares Offered Hereby	Number of Shares	Percent (%)
Growth Equity Opportunities Fund III, LLC (4) c/o New Enterprise Associates, Inc. 1954 Greenspring Drive, Suite 600 Timonium, MD 21093	27,000,964	20.2 %	27,000,964	0	-
Merlin Nexus IV, LP (5)					
424 West 33 rd Street	0.000.222	7.1 0	0 000 222	0	
Suite 330	9,000,322	7.1 %	9,000,322	0	-
New York, NY 10001					
Condor Trading LP (6)					
600 Montgomery Street	(27.521	Ψ	(27.521	0	
6 th Floor	637,521	*	637,521	0	-
San Francisco, CA 94111					
Millennium Trust Company, LLC, Custodian FBO Keith C. Stone IRA (7) 2824 Filbert Street San Francisco, CA 94123	430,516	*	430,516	0	-
Millennium Trust Company, LLC, Custodian FBO Keith C. Stone Roth IRA (8) 2824 Filbert Street San Francisco, CA 94123	207,007	*	207,007	0	-
CDB Advisory Group, LLC (9) 1 Essex Place Bronxville, NY 10708	3,888,395	3.2 %	2,550,091	1,338,304	1.1 %
Millennium Trust Company, LLC, Custodian FBO Michael Bird IRA (10) 2001 Spring Road	528,395	*	528,395	0	-

Suite 700

Oak Brook, IL 60523

4100 Okemos Road Okemos, MI 48864

Millennium Trust Company, LLC, Custodian FBO Michael Bird Roth IRA (11) 2001 Spring Road Suite 700	146,631		146,631	0	-
Oak Brook, IL 60523		*			
Pyxis Innovations Inc. (12) 7575 Fulton Street East Ada, MI 49355	37,565,478	30.8 %	30,681,422	6,884,056	5.6 %
Delta Dental Plan of Michigan, Inc. (13)	10 028 061	80 %	10 928 961	0	_

10,928,961

8.9 % 10,928,961 0

	Shares Beneficially Owned Prior to the Offering (1)		Number of	Shares Beneficially Ov Following the Offering (1)	ned	
Name	Number of Shares	Percent (%)	Shares Offered Hereby	Number of Shares	Percent (%)	
Keith C. Stone (14)			Hereby	Situres		
c/o BTIG, LLC	819,672	*	688,525	131,147	*	
600 Montgomery Street, 6th Floor	819,072	·	000,323	131,147	·	
San Francisco, CA 94111						
BTIG, LLC (15)						
600 Montgomery Street, 6th Floor	1,912,568	1.5 %	6 1,606,557	306,011	*	
San Francisco, CA 94111						

Less than one percent.

We do not know when or in what amounts the selling stockholders may offer shares for sale. The selling stockholders might not sell a portion or all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, we cannot estimate the number of the

Number of shares beneficially owned prior to the offering and offered hereby includes (i) 20,187,464 shares issued in the Private Placement and (ii) up to 15,140,598 shares issuable upon exercise of Warrants issued in the Private

Number of shares beneficially owned prior to the offering and offered hereby includes (i) 384,699 shares issued in the Private Placement and (ii) up to 288524 shares issuable upon exercise of Warrants issued in the Private

Number of shares beneficially owned prior to the offering and offered hereby includes (i) 15,429,122 shares issued (4) in the Private Placement and (ii) up to 11,571,842 shares issuable upon exercise of Warrants issued in the Private Placement.

⁽¹⁾ shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders, and all of the shares not covered by this prospectus will be held by the selling stockholders.

⁽²⁾ Placement. Two of our directors, Lionel Carnot and Dayton Misfeldt, are affiliates of Bay City Capital Fund V, L.P. Number of shares beneficially owned in the table above does not include the shares owned by BayCity Capital Fund V Co-Investment Fund, L.P., which may be deemed to be beneficially owned by Bay City Capital Fund V, L.P. See Note (3).

⁽³⁾ Placement. Two of our directors, Lionel Carnot and Dayton Misfeldt, are affiliates of Bay City Capital Fund V Co-Investment Fund, L.P. Number of shares beneficially owned in the table above does not include the shares owned by BayCity Capital Fund V, L.P., which may be deemed to be beneficially owned by Bay City Capital Fund V Co-Investment Fund, L.P. See Note (2).

- Number of shares beneficially owned prior to the offering and offered hereby includes (i) 5,143,041 shares issued (5) in the Private Placement and (ii) up to 3,857,281 shares issuable upon exercise of Warrants issued in the Private Placement.
 - Number of shares beneficially owned prior to the offering and offered hereby includes (i) 364,298 shares issued in the Private Placement and (ii) up to 273,223 shares issuable upon exercise of Warrants issued in the Private Placement. Number of shares beneficially owned in the table above does not include the shares owned by BTIG, LLC, which may be deemed to be beneficially owned by Condor Trading LP, the parent company of BTIG, LLC.
- (6) See Note (15). Condor Trading LP is an affiliate of a broker-dealer, and has certified to us that it purchased the shares of common stock and Warrants in the Private Placement in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person to distribute the common stock purchased in the Private Placement or the shares of common stock issuable upon exercise of the Warrants. Number of shares beneficially owned prior to the offering and offered hereby includes (i) 246,009 shares issued in the Private Placement and (ii) up to 184,507 shares issuable upon exercise of Warrants issued in the Private Placement. Number of shares beneficially owned in the table above does not include the shares directly owned by
- (7) Keith C. Stone. See Note (14). Keith C. Stone is an affiliate of a broker-dealer, and has certified to us that Millennium Trust Company, LLC, Custodian FBO Keith C. Stone IRA purchased the shares of common stock and Warrants in the Private Placement in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person to distribute the common stock purchased in the Private Placement or the shares of common stock issuable upon exercise of the Warrants.

 Number of shares beneficially owned prior to the offering and offered hereby includes (i) 118,290 shares issued in the Private Placement and (ii) up to 88,717 shares issuable upon exercise of Warrants issued in the Private Placement. Number of shares beneficially owned in the table above does not include the shares directly owned by
- (8) Keith C. Stone. See Note (14). Keith C. Stone is an affiliate of a broker-dealer, and has certified to us that Millennium Trust Company, LLC, Custodian FBO Keith C. Stone Roth IRA purchased the shares of common stock and Warrants in the Private Placement in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person to distribute the common stock purchased in the Private Placement or the shares of common stock issuable upon exercise of the Warrants.

 Number of shares beneficially owned prior to the offering and offered hereby includes (i) 1,457,195 shares issued in the Private Placement and (ii) up to 1,092,896 shares issuable upon exercise of Warrants issued in the Private Placement. Number of shares beneficially owned prior to and following the offering includes 1,338,304 shares that
- (9) are not registered for resale pursuant to this prospectus. CDB Advisory Group, LLC is an affiliate of a broker-dealer, and has certified to us that it purchased the shares of common stock and Warrants in the Private Placement in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person to distribute the common stock purchased in the Private Placement or the shares of common stock issuable upon exercise of the Warrants.

- Number of shares beneficially owned prior to the offering and offered hereby includes (i) 301,940 shares issued in the Private Placement and (ii) up to 226,455 shares issuable upon exercise of Warrants issued in the Private Placement. Number of shares beneficially owned in the table above does not include 170,000 shares directly owned by Michael Bird. Michael Bird is an affiliate of a broker-dealer, and has certified to us that Millennium
- (10) Trust Company, LLC, Custodian FBO Michael Bird IRA purchased the shares of common stock and Warrants in the Private Placement in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person to distribute the common stock purchased in the Private Placement or the shares of common stock issuable upon exercise of the Warrants.
 - Number of shares beneficially owned prior to the offering and offered hereby includes (i) 83,789 shares issued in the Private Placement and (ii) up to 62,842 shares issuable upon exercise of Warrants issued in the Private Placement. Number of shares beneficially owned in the table above does not include 170,000 shares directly
- owned by Michael Bird. Michael Bird is an affiliate of a broker-dealer, and has certified to us that Millennium Trust Company, LLC, Custodian FBO Michael Bird Roth IRA purchased the shares of common stock and Warrants in the Private Placement in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person to distribute the common stock purchased in the Private Placement or the shares of common stock issuable upon exercise of the Warrants.

 Number of shares beneficially owned prior to the offering and offered hereby includes 28,160,200 shares issued in the Series A-1 Conversion and 2,521,222 shares issued pursuant to the Debt Conversion. Number of shares
- beneficially owned prior to and following the offering includes 6,884,056 shares that are not registered for resale pursuant to this prospectus. Two of our directors, James Weaver and Roger Colman, are affiliates of Pyxis. In addition, the following affiliates of Pyxis have served as directors of the Company within the past three years: Catherine R. Ehrenberger, Glenn S. Armstrong, George D. Calvert and Thomas R. Curran, Jr.
- Number of shares beneficially owned prior to the offering and offered hereby consists of 10,928,961 shares issued pursuant to the Series B Conversion. One of our directors, Goran Jurkovic, is an affiliate of DDMI.

 Number of shares beneficially owned prior to the offering and offered hereby includes up to 688,525 shares issuable upon exercise of the BTIG Warrants issued as compensation for service as placement agent in the Private Placement. Mr. Stone is an affiliate of BTIG, LLC and the securities held by Mr. Stone and registered for resale hereunder were received as compensation for service as placement agent in the Private Placement. Number of
- shares beneficially owned prior to and following the offering also includes up to 131,147 shares issuable upon exercise of warrants issued as partial compensation for service as placement agent in a previous private placement. Number of shares beneficially owned in the table above does not include the shares owned by Millennium Trust Company, LLC, Custodian FBO Keith C. Stone IRA or Millennium Trust Company, LLC, Custodian FBO Keith C. Stone IRA or Millennium Trust Company, LLC, Custodian FBO Keith C. Stone Roth IRA, which may be deemed to be beneficially owned by Mr. Stone. See Notes (7) and (8).
 - Number of shares beneficially owned prior to the offering and offered hereby includes up to 1,606,557 shares issuable upon exercise of the BTIG Warrants issued as compensation for service as placement agent in the Private Placement. Number of shares beneficially owned prior to and following the offering also includes up to 306,011
- (15) shares issuable upon exercise of warrants issued as partial compensation for service as placement agent in a previous private placement. Number of shares beneficially owned in the table above does not include the shares owned by Condor Trading LP, the parent company of BTIG, LLC, which may be deemed to be beneficially owned by BTIG, LLC. See Note (6).

PLAN OF DISTRIBUTION

Each selling stockholder of the shares of our common stock and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their shares of common stock covered hereby on the OTCQB or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling shares of our common stock:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
 - an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;

in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise:

a combination of any such methods of sale; or

any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of shares of common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of shares of common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of common stock short and deliver these securities to close out their short positions, or loan or pledge the shares of common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the shares of common stock. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling stockholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. The selling stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for Interleukin to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale of shares of common stock covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to our common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

DESCRIPTION OF OUR CAPITAL STOCK

The following description of our common stock and preferred stock, together with any additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of our common stock and the preferred stock that we may offer under this prospectus. For the complete terms of our common stock and preferred stock, please refer to our certificate of incorporation, as amended, and amended and restated bylaws, which are exhibits to the registration statement that includes this prospectus. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Under our certificate of incorporation, as amended, our authorized capital stock consists of 150,000,000 shares of common stock, \$0.001 par value per share, and 6,000,000 shares of undesignated preferred stock, \$0.001 par value per share. As of June 1, 2013, we had 122,140,718 shares of common stock outstanding and no shares of preferred stock outstanding. We have filed a definitive proxy statement with the SEC for our 2013 annual meeting of stockholders to be held on August 9, 2013 that includes a proposal to approve an increase in our authorized common stock from 150,000,000 shares to 300,000,000 shares. There is also a proposal to approve an amendment to our certificate of incorporation, as amended, to effect a reverse stock split by combining outstanding shares of our common stock into a lesser number of outstanding shares by a ratio of not less than 1-for-5 and not more than 1-for-20 at any time prior to the earlier of (i) August 1, 2014 and (ii) the 2014 annual meeting of stockholders, with the exact ratio to be set within this range by our board of directors in its sole discretion.

Common Stock

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. All shares of common stock outstanding as of the date of this prospectus and, upon issuance and sale, all shares of common stock that we may offer pursuant to this prospectus, will be fully paid and nonassessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

OTCQB

Our common stock is traded on the OTCQB under the symbol "ILIU." On June 28, 2013, the last reported sale price of our common stock was \$0.42 per share.

Preferred Stock

Under the terms of our certificate of incorporation, as amended, our board of directors is authorized to issue up to 6,000,000 shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. Authorizing our board of directors to issue preferred stock and determine its rights and preferences has the effect of eliminating delays associated with a stockholder vote on specific issuances.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

the title and stated value;

the number of shares offered, the liquidation preference per share and the purchase price; the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends; whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;
the provisions for a sinking fund, if any;
the provisions for redemption, if applicable;
any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;

whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;

voting rights, if any, of the preferred stock;

- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock; the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of Interleukin Genetics; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of Interleukin Genetics.

Anti-Takeover Provisions under Delaware law and our Delaware Certificate of Incorporation and Bylaws

Our certificate of incorporation, as amended, amended and restated bylaws and provisions of Delaware law contain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of our company unless such takeover or change in control is approved by our board of directors.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed 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 potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Statutory Business Combinations Provision

We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. For purposes of Section 203, a "business combination" is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to us and, accordingly, may discourage attempts to acquire us.

Classified Board of Directors; Removal of Directors for Cause

Our certificate of incorporation and amended and restated bylaws provide for our board of directors to be divided into three classes, as nearly equal in number as possible, serving staggered terms. Approximately one-third of our board will be elected each year. At each annual meeting of stockholders, directors elected to succeed those directors whose terms expire will be elected for a three-year term of office. All directors elected to our classified board of directors will serve until the election and qualification of their respective successors or their earlier resignation or removal. The board of directors is authorized to create new directorships and to fill such positions so created and is permitted to specify the class to which any such new position is assigned. The person filling such position would serve for the term applicable to that class. The board of directors (or its remaining members, even if less than a quorum) is also empowered to fill vacancies on the board of directors occurring for any reason for the remainder of the term of the class of directors in which the vacancy occurred. Members of the board of directors may only be removed for cause and only by the affirmative vote of a majority of our outstanding voting stock. These provisions are likely to increase the time required for stockholders to change the composition of the board of directors. For example, in general, at least two annual meetings will be necessary for stockholders to effect a change in a majority of the members of the board of directors. The provision for a classified board could prevent a party who acquires control of a majority of our outstanding common stock from obtaining control of our board of directors until our second annual stockholders meeting following the date the acquirer obtains the controlling stock interest. The classified board provision could have the effect of discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us and could increase the likelihood that incumbent directors will retain their positions.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors

Our amended and restated bylaws provide that, for nominations to the board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely

notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder's notice generally must be delivered not less than 60 days nor more than 90 days prior to the anniversary of the previous year's annual meeting. Detailed requirements as to the form of the notice and information required in the notice are specified in the amended and restated bylaws. If it is determined that business was not properly brought before a meeting in accordance with our restated bylaws, such business will not be conducted at the meeting.

Special Meetings of Stockholders

Special meetings of the stockholders may be called only by the Chairman of the Board, the Chief Executive Officer or our board of directors pursuant to a resolution adopted by a majority of the directors then in office.

No Stockholder Action by Written Consent

Our certificate of incorporation, as amended, does not permit our stockholders to act by written consent. As a result, any action to be effected by our stockholders must be effected at a duly called annual or special meeting of the stockholders.

Super-Majority Stockholder Vote Required for Certain Actions.

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless the corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our certificate of incorporation, as amended, requires the affirmative vote of the holders of at least $66^2/_3\%$ of our outstanding voting stock to amend or repeal certain provisions of our restated certificate of incorporation. This "super-majority" stockholder vote would be in addition to any separate class vote that might be required pursuant to the terms of any preferred stock that might then be outstanding. In addition, our amended and restated bylaws may only be amended by (1) the affirmative vote of the holders of at least $66^2/_3\%$ of our outstanding voting stock or (2) the affirmative vote of not less than two-thirds of the directors then in office.

Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of any securities market or exchange our securities may be listed or traded on. We may utilize these additional shares for a variety of corporate purposes including for future public offerings to raise additional capital or facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a controlling interest in our company by means of a merger, tender offer, proxy contest or otherwise. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation.

Limitation of Liability and Indemnification of Officers and Directors

Our certificate of incorporation, as amended, and our amended and restated bylaws limit the liability of our officers and directors to the fullest extent permitted by the Delaware General Corporation Law and provide that we will indemnify them to the fullest extent permitted by such law. We have also entered into indemnification agreements with our current and former directors and certain of our officers and key employees and expect to enter into a similar agreement with any new directors, officers or key employees.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

LEGAL MATTERS

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, will pass upon the validity of the issuance of the securities offered by this prospectus.

EXPERTS

The audited financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing in giving said report.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's website at http://www.sec.gov. Our common stock is listed on OTCQB, and you can read and inspect our filings at the offices of the Financial Industry Regulatory Authority at 1735 K Street, Washington, D.C. 20006.

We have filed a registration statement, of which this prospectus is a part, covering the securities offered hereby. As allowed by SEC rules, this prospectus does not include all of the information contained in the registration statement and the included exhibits and financial statements. You are referred to the registration statement, the included exhibits and financial statements for further information. This prospectus is qualified in its entirety by such other information.

We also maintain a website at http://www.ilgenetics.com, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, 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. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-33827).

our Annual Report on Form 10-K for the year ended December 31, 2012 filed on March 28, 2013, as amended by the Form 10-K/A filed on April 29, 2013;

- our Quarterly Report on Form 10-K for the quarter ended March 31, 2013 filed on May 14, 2013; our Current Reports on Form 8-K filed on January 3, 2013, March 1, 2013, March 28, 2013, May 20, 2013 (as amended by the Form 8-K/A filed on June 5, 2013) and June 5, 2013 (other than the portions of those reports not deemed to be filed);
- the portions of our Definitive Proxy Statement on Schedule 14A filed on June 24, 2013 that are deemed "filed" with the SEC under the Exchange Act; and
- the description of our common stock contained in Item 1 of our Registration Statement on Form 8-A dated December 27, 2005, including any amendment or report filed for the purpose of updating such description.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting: Investor Relations, Interleukin Genetics, Inc., 135 Beaver Street, Waltham, Massachusetts 02452. Our telephone number is (781) 398-0700.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus.

120,408,197 SHARES OF COMMON STOCK

The date of this prospectus is , 2013

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, payable by the Company in connection with the registration and sale of the common stock being registered. All amounts are estimates except the SEC registration fee.

An	nount to be paid (\$)
\$	7,637
	5,000
	25,000
	15,000
	2,363
\$	55,000
	An \$

Item 14. Indemnification of Directors and Officers.

Pursuant to Section 145 of the Delaware General Corporation Law (the "DGCL"), our amended and restated bylaws provide that each director or officer of Interleukin Genetics, who was or is made a party or is threatened to be made a party to or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer of Interleukin Genetics, or is or was serving at the request of Interleukin Genetics as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, shall be indemnified and held harmless by Interleukin Genetics to the fullest extent authorized by the DGCL.

Pursuant to Section 102(b)(7) of the DGCL, Article 6, Section 8 of our certificate of incorporation, as amended, eliminates the liability of a director to us or our stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

from any breach of the director's duty of loyalty to us or our stockholders;
from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
under Section 174 of the Delaware General Corporation Law; and
from any transaction from which the director derived an improper personal benefit.

We carry insurance policies insuring our directors and officers against certain liabilities that they may incur in their capacity as directors and officers. In addition, we have entered into indemnification agreements with our directors and officers.

The foregoing discussion of our certificate of incorporation, bylaws and Delaware law is not intended to be exhaustive and is qualified in its entirety by such certificate of incorporation, bylaws or law.

Item 15. Recent Sales of Unregistered Securities

Since January 1, 2010, we have offered, issued and/or sold the following securities, which were not registered under the Securities Act of 1933, as amended:

We have granted options to purchase an aggregate of 1,914,500 shares of our common stock, \$0.001 par value per 1.share (the "Common Stock"), to certain of our employees and directors, at a weighted average exercise price of \$0.4139 per share.

- 2. We have granted an aggregate of 10,000 restricted shares of our common stock, to certain of our employees and directors, at a purchase price of \$0.001 per share.
- 3. On February 1, 2010, we issued a convertible promissory note in the amount of \$2,000,000 to Pyxis Innovations Inc. ("Pyxis") under an existing credit facility.
- 4. On September 30, 2010, we issued a convertible promissory note in the amount of \$2,000,000 to Pyxis under an existing credit facility.
- 5. On November 9, 2011, we issued a convertible promissory note in the amount of \$2,000,000 to Pyxis under an existing credit facility.
- 6. On April 13, 2012, we issued a convertible promissory note in the amount of \$1,316,255 to Pyxis under an existing credit facility.

On June 29, 2012, we entered into an Exchange Agreement with Pyxis Innovations Inc. ("Pyxis"), pursuant to which Pyxis exchanged the 5,000,000 shares of our outstanding Series A convertible preferred stock, \$0.001 par value per share (the "Series A Preferred Stock"), it held for 5,000,000 shares of Series A-1 convertible preferred stock, \$0.001 par value per share (the "Series A-1 Preferred Stock"). On June 29, 2012, we also entered into a Stock Purchase Agreement with Delta Dental Plan of Michigan, Inc. ("Delta Dental"), pursuant to which, we sold to Delta Dental 500,000 shares (the "Series B Shares") of Series B convertible preferred stock, \$0.001 par value per share (the "Series B Preferred Stock"), at a purchase price of \$6.00, per share for gross proceeds of \$3,000,000. BTIG, LLC served as exclusive placement agent and received cash compensation in the amount of approximately \$210,000 and a warrant to purchase 437,158 shares of our Common Stock, at an exercise price of \$0.2745 per share. The warrant is exercisable immediately and expires five years from the date of grant. Each share of Series A-1 Preferred Stock and Series B Preferred Stock is convertible at the option of the holder into such number of shares of Common Stock as is determined by dividing the applicable original purchase price (\$1.80 per share for the Series A-1 Preferred Stock and \$6.00 per share for the Series B Preferred Stock) by the Series A-1 Conversion Price or the Series B Conversion Price, as applicable. The "Series A-1 Conversion Price" is \$0.3196 and the "Series B Conversion Price" is \$0.2745. The Series A-1 Preferred Stock was issued in a transaction exempt from registration under the Securities Act of 1933, as amended (the "Securities Act") in reliance on Section 3(a)(9) thereof. On May 17, 2013, we entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with various accredited investors (the "Purchasers"), pursuant to which we sold an aggregate of 43,715,847 shares of Common Stock, at a price of \$0.2745 per share for gross proceeds of \$12,000,000. The Purchasers also received warrants to purchase up to an aggregate of 32,786,885 shares of Common Stock an exercise price of \$0.2745 per share (the "Warrants"). The Warrants are exercisable as to 63% of the shares immediately and as to 37% of the shares following receipt of shareholder approval of a proposal to amend the Company's Certificate of Incorporation to increase the number of authorized shares of Common Stock from 150,000,000 shares to 300,000,000 shares, and have a term of seven years from the date they become exercisable. Immediately prior to the closing of this offering, and in accordance with the terms of the Purchase Agreement: (i) Pyxis converted all 5,000,000 shares of Series A-1 Preferred Stock it held into 28,160,200 shares of Common Stock (the "Series A-1 Conversion"); (ii) Pyxis converted \$14,316,255 in principal amount of convertible debt outstanding into 2,521,222 shares of Common Stock (the "Debt Conversion"); and (iii) DDMI converted all 500,000 outstanding shares of Series B Preferred Stock it held into 10,928,961 shares of Common Stock (the "Series B Conversion"). BTIG, LLC served as exclusive placement agent and received cash compensation in the amount of approximately \$780,000 and a warrant to purchase 2,295,082 shares of Common Stock, at an exercise price of \$0.2745 per share. This warrant is exercisable following the receipt of shareholder approval of a proposal to amend the Company's Certificate of Incorporation to increase the number of authorized shares of Common Stock from 150,000,000 shares to 300,000,000 shares and expires seven years from the date it becomes exercisable. The shares of Common Stock issued pursuant to the Series A-1 Conversion, the Series B Conversion and Debt Conversion were issued in a transaction exempt from registration under the Securities

Other than as specifically noted above, the issuances of the securities referenced above were made in reliance on Section 4(a)(2) of the Securities Act, or Regulation D promulgated thereunder, as sales not involving a public offering. No underwriters were involved in the foregoing sales of securities. The recipients of securities in each of the above-referenced transactions represented their intentions to acquire the securities for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and appropriate legends were affixed to the instruments representing such securities issued in such transactions. All recipients either received adequate information about us or had, through their relationship with us, adequate access to such information.

Act of 1933, as amended (the "Securities Act") in reliance on Section 3(a)(9) thereof.

Item 16. Exhibits and Financial Statement Schedules.

See Exhibit Index following the signature page to this Registration Statement.
Item 17. Undertakings.
The undersigned registrant hereby undertakes:
(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser: each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Massachusetts, on July 1, 2013.

INTERLEUKIN GENETICS, INC.

By/s/ Kenneth S. Kornman Kenneth S. Kornman President and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Interleukin Genetcis, Inc., hereby severally constitute and appoint Kenneth S. Kornman and Eliot M. Lurier, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in our name and behalf in our capacities as officers and directors to enable Interleukin Genetics, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

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

Signatures	Title	Date
By:/s/ Kenneth S. Kornman Kenneth S. Kornman	President and Chief Executive Officer (principal executive officer) and Director	July 1, 2013
By:/s/ Eliot M. Lurier Eliot M. Lurier	Chief Financial Officer (principal financial officer and principal accounting officer)	July 1, 2013
By:/s/ James M. Weaver	Chairman of the Board of Directors	July 1, 2013

July 1, 2013

James M. Weaver		
By:/s/ Lionel Carnot Lionel Carnot	Director	July 1, 2013
By:/s/ Roger C. Colman Roger C. Colman	Director	July 1, 2013
By:/s/ Goran Jurkovic Goran Jurkovic	Director	July 1, 2013
By:/s/ William C. Mills III William C. Mills III	Director	July 1, 2013

Director

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By:/s/ Dayton Misfeldt Dayton Misfeldt

EXHIBIT INDEX

The exhibits listed below are filed as part of or incorporated by reference into this Registration Statement on Form S-1. Where certain exhibits are incorporated by reference from a previous filing, the exhibit numbers and previous filings are identified in parentheses. The SEC file number for each Form 10-K, Form 10-Q and Form 8-K identified below is File No. 001-32715.

Exhibit No.	Identification of Exhibit
3.1.1	Certificate of Incorporation of the Company, as filed with the Delaware Secretary of State on March 28, 2000 (incorporated herein by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)
3.1.2	Certificate of Designations, Preferences and Rights of Series A Preferred Stock, as filed with the Delaware Secretary of State on March 5, 2003 (incorporated herein by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on March 5, 2003)
3.1.3	Certificate of Amendment to Certificate of Incorporation, as filed with the Delaware Secretary of State on August 5, 2003 (incorporated herein by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed on November 12, 2003)
3.1.4	Certificate of Amendment to Certificate of Incorporation, as filed with the Delaware Secretary of State on June 21, 2007 (incorporated herein by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed on August 9, 2007)
3.1.5	Corrected Certificate of Amendment filed with the Delaware Secretary of State on June 29, 2012 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed on July 2, 2012)
3.1.6	Certificate of Elimination of the Series A Preferred Stock filed with the Delaware Secretary of State on June 29, 2012 (incorporated by reference to Exhibit 3.2 of the Current Report on Form 8-K filed on July 2, 2012)
3.1.7	Certificate of Designations, Preferences, and Rights of Series A-1 Preferred Stock and Series B Preferred Stock filed with the Delaware Secretary of State on June 29, 2012 (incorporated by reference to Exhibit 3.3 of the Current Report on Form 8-K filed on July 2, 2012)
3.1.8	Certificate of Amendment filed with the Delaware Secretary of State on August 9, 2012 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed on August 9, 2012)
3.1.9	Certificate of Elimination of the Series A-1 Preferred Stock and Series B Preferred Stock filed with the Delaware Secretary of State on May 31, 2013 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed on June 5, 2013)
3.2	Amended and Restated Bylaws of the Company dated July 24, 2008 (incorporated by reference to the Current Report on Form 8-K filed on July 28, 2008)
4.1	Form of Stock Certificate representing Common Stock, \$0.001 par value, of the Company (incorporated herein by reference to Exhibit 4.1 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)
4.2	Form of Common Stock Purchase Warrant (incorporated herein by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on March 5, 2010)
4.3	Form of Common Stock Purchase Warrant issued to the Purchasers in the May 2013 Private Placement (incorporated herein by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on May 20, 2013)
4.4	171ay 20, 2013)

Form of Common Stock Purchase Warrant issued to BTIG, LLC and affiliate in the May 2013 Private Placement (incorporated herein by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K filed on May 20, 2013)

5.1** Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Leases

- Commercial Lease Agreement between the Company and Clematis LLC dated February 13, 2004
- 10.1 (incorporated herein by reference to Exhibit 10.44 of the Company's Annual Report on Form 10-K filed on March 29, 2004)
 - Sublease Agreement between the Company and Kala Pharmaceuticals, Inc. dated April 12, 2010
- 10.2 (incorporated herein by reference to Exhibit 10.2 of the Company's Annual Report on Form 10-K filed on March 24, 2011)

Equity Compensation Plans

- 10.3.1@ 2000 Employee Stock Compensation Plan for the Company (incorporated herein by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)

 Form of Nonqualified Stock Option Agreement under the 2000 Employee Stock Compensation Plan
- 10.3.2@ (incorporated herein by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)
 - Form of Incentive Stock Option Agreement under the 2000 Employee Stock Compensation Plan
- 10.3.3@ (incorporated herein by reference to Exhibit 10.5 of the Company's Quarterly Report on Form 10-Q filed August 14, 2000)

Exhibit	
No.	Identification of Exhibit
10.4.1@	Interleukin Genetics, Inc. 2004 Employee, Director and Consultant Stock Plan (incorporated by reference to Appendix A of the Company's Definitive Proxy Statement filed on April 29, 2011) Form of Nonqualified Stock Option Agreement under the 2004 Employee, Director and Consultant Stock
10.4.2@	Plan (incorporated by reference to Exhibit 10.5.1 of the Company's Annual Report on Form 10-K filed March 25, 2010)
10.4.3@	Form of Incentive Stock Option Agreement under the 2004 Employee, Director and Consultant Stock Plan (incorporated by reference to Exhibit 10.5.2 of the Company's Annual Report on Form 10-K filed March 25, 2010)
	Agreements with Executive Officers and Directors
10.5.1@	Employment Agreement dated November 12, 2008 between the Company and Kenneth S. Kornman (incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q filed on November 13, 2008)
10.5.2	First Amendment, effective as of March 31, 2012, to the Employment Agreement, dated as of November 12, 2008, by and between Interleukin Genetics, Inc. and Kenneth S. Kornman (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on April 26, 2012)
10.5.3	Second Amendment, dated November 29, 2012, to the Employment Agreement, dated as of November 12, 2008, by and between Interleukin Genetics, Inc. and Kenneth S. Kornman (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on November 30, 2012)
10.6@	Employment Agreement dated February 14, 2011 between the Company and Lewis H. Bender (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on February 16, 2011)
10.6.1	Separation Agreement, dated September 14, 2012, between Interleukin Genetics, Inc. and Lewis H. Bender (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on September 30, 2012)
10.7@	Employment agreement dated April 30, 2008 between the Company and Eliot M. Lurier (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed on August 13, 2008)
10.8@	Form of Director Indemnity Agreement dated March 5, 2003 (incorporated herein by reference to Exhibit 10.13 of the Company's Current Report on Form 8-K filed on March 5, 2003)
10.9@	Director Compensation Policy dated April 29, 2010 (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed August 12, 2010)
10.10@	Employment agreement dated December 26, 2012 between the Company and Scott Snyder (incorporated by reference to Exhibit 101 of the Company's Annual Report on Form 10-K filed on March 28, 2013)
	Agreements with respect to Financings and Rights of Stockholders
10.11	Registration Rights Agreement dated August 9, 2002 (incorporated herein by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q filed on November 7, 2002)
10 12 1	Security Agreement between the Company and Pyxis Innovations Inc., dated October 23, 2002
10.12.1	(incorporated herein by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on October 28, 2002)
10.122	Amendment No. 2 to the Security Agreement between the Company and Pyxis Innovations Inc., dated March 5, 2003 (incorporated herein by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed on March 5, 2003)
10.13.1	Stock Purchase Agreement between the Company and Pyxis Innovations Inc. dated March 5, 2003 (incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on March 5, 2003)

- Amendment No. 1 to Stock Purchase Agreement between the Company and Pyxis Innovations Inc. dated 10.13.2 May 20, 2003 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K
- 10.13.2 May 20, 2003 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 30, 2003)
 - Second Amendment to Stock Purchase Agreement between the Company and Pyxis Innovations Inc. dated
- 10.13.3 February 28, 2005 (incorporated by reference to Exhibit 10.41 of the Company's Annual Report on Form 10-K filed on April 26, 2005)
- Third Amendment, dated June 29, 2012, to the Stock Purchase Agreement, dated March 3, 2003, between 10.13.4 Interleukin and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.5 of the Current Report on Form 8-K filed on July 2, 2012)
 - Stock Purchase Agreement Between the Company and Pyxis Innovations Inc. dated August 17, 2006
- 10.14 (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K/A filed on October 31, 2006)
- Form of Amended and Restated Promissory Note under credit facility with Pyxis Innovations Inc.

 (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on November 30, 2012)

 Amended and Restated Note Purchase Agreement between the Company and Pyxis Innovations Inc. dated
- 10.16.1 March 10, 2009 (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on March 13, 2009)
 First Amendment, dated August 10, 2009, to Amended and Restated Note Purchase Agreement dated
- 10.16.2 March 10, 2009, by and between the Company and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed on August 13, 2009)

Exhibit No.	Identification of Exhibit
10.16.3	Second Amendment, dated February 1, 2010, to Amended and Restated Note Purchase Agreement by and between the Company and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.1 of the Company's current Report on Form 8-K filed on February 2, 2010)
10.16.4	Third Amendment, dated September 30, 2010, to Amended and Restated Note Purchase Agreement by and between the Company and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on October 4, 2010)
10.16.5	Fourth Amendment, dated June 29, 2012, to the Amended and Restated Note Purchase Agreement, dated March 11, 2009, between Interleukin and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.4 of the Current Report on Form 8-K filed on July 2, 2012)
10.16.6	Fifth Amendment, dated November 30, 2012, to the Amended and Restated Note Purchase Agreement, dated March 11, 2009, between Interleukin and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on November 30, 2012)
10.16.7	Consent under the Note Purchase Agreement, effective as of the 1 st day of April, 2013, by and between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q filed on May 14, 2013)
10.17	Exchange Agreement, dated June 29, 2012, between Interleukin and Pyxis Innovations Inc. (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on July 2, 2012)
10.18	Stock Purchase Agreement, dated June 29, 2012, between Interleukin and Delta Dental Plan of Michigan, Inc. (incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed on July 2, 2012)
10.19	Common Stock Purchase Agreement, dated May 17, 2013, by and among Interleukin and the Purchasers in the May 2013 Private Placement (incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 20, 2013)
10.20	Registration Rights Agreement, dated May 17, 2013, by and among Interleukin and the Purchasers in the May 2013 Private Placement, Pyxis Innovations Inc., Delta Dental Plan of Michigan, Inc. and BTIG, LLC (incorporated herein by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on May 20, 2013)
10.21	Voting Agreement and Irrevocable Proxy, dated May 17, 2013, between Interleukin and Pyxis Innovations Inc (incorporated herein by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed on May 20, 2013)
	Agreements with respect to Collaborations, Licenses and Research and Development Exclusive License Agreement between the Company and Access Business Group dated March 5, 2003
10.22.1	(incorporated herein by reference to Exhibit 10.7 of the Company's Current Report on Form 8-K filed on March 5, 2003)
10.22.2	First Amendment to License Agreement by and between the Company and Access Business Group International, LLC, dated September 1, 2008 (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q filed on November 13, 2008)
10.23	Merchant Network and Channel Partner Agreement dated October 26, 2009 by and between the Company and Amway Corp. (incorporated by reference to Exhibit 10.23 of the Company's Annual Report on Form
10.24+	10-K filed on March 25, 2010) License Agreement, dated September 21, 2012, between Access Business Group International LLC and Interleukin Genetics, Inc. (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on
10.25	Form 10-Q filed on November 14, 2012) Professional Services Agreement, dated September 21, 2012, between Access Business Group International LLC and Interleukin Genetics, Inc. (incorporated by reference to Exhibit 10.1 of the Company's Quarterly

Report on Form 10-Q filed on November 14, 2012)

Preferred Participation Agreement, dated February 25, 2013, by and between Interleukin Genetics, Inc. and 10.26++ Renaissance Health Service Corporation and its affiliates and subsidiaries (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q filed on May 14, 2013)

Consents, Certifications and Other Exhibits

- 23.1* Consent of Grant Thornton LLP
- 23.2** Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1)
- 24.1* Powers of Attorney (included on the signature page to this registration statement)
 The following materials from Interleukin Genetics Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) the Balance
- 101.1*** Sheets, (ii) the Statements of Operations, (iii) the Statements of Stockholders' Deficit, (iv) the Statements of Cash Flows, and (v) Notes to Financial Statements (incorporated by reference to Exhibit 101 of the Company's Annual Report on Form 10-K filed on March 28, 2013)

Exhibit No. Identification of Exhibit

The following materials from Interleukin Genetics Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, formatted in XBRL (eXtensible Business Reporting Language): (i) the Condensed Balance Sheets, (ii) the Condensed Statements of Operations, (iii) the Condensed Statements of Stockholders' Deficit, (iv) the Condensed Statements of Cash Flows, and (v) Notes to Condensed Financial Statements (incorporated by reference to Exhibit 101 of the Company's Quarterly Report on Form 10-Q filed on May 14, 2013)

* Filed herewith.

To be filed by amendment.

- The Securities and Exchange Commission with respect to certain portions of this exhibit has previously granted confidential treatment. Omitted portions have been filed separately with the Securities and Exchange Commission.

 Confidential portions of such document have been filed separately with the SEC pursuant to a request for confidential treatment.
- Management contract or compensatory plan, contract or arrangement.
 Users of XBRL data are advised pursuant to Rule 406T of Regulation S-T that this interactive data file is deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.