INTERLEUKIN GENETICS INC Form 424B3 May 23, 2001

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REGISTRATION NO. 333-56558

PROSPECTUS

2,186,441 SHARES

INTERLEUKIN GENETICS, INC.

COMMON STOCK

The selling shareholders named on page 10 are offering up to 2,186,441 shares of our common stock. These shares include 728,814 shares issuable upon the exercise of warrants to purchase common stock. We may receive up to \$2,202,544 upon the exercise of the warrants. The prices at which the selling shareholders may sell these shares will be determined by the prevailing market price for the shares or in negotiated transactions.

Our common stock is traded on The Nasdaq SmallCap Market and The Boston Stock Exchange under the symbol "ILGN." On May 22, 2001, the last reported sale price for our common stock on the Nasdaq SmallCap Market was \$2.48 per share.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE THE SECTION ENTITLED "RISK FACTORS" BEGINNING ON PAGE 3.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is May 22, 2001.

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INTERLEUKIN GENETICS, INC.

We develop and sell genetic susceptibility tests, tests that identify which individuals will respond to specific drug therapies and medical research tools. We focus our efforts on discovering genetic factors that predict the susceptibility of individuals to various diseases or determine which individuals will respond to a specific drug therapy. We market PST(R) in the United States and Europe. PST is our first genetic test and predicts the risk of periodontal disease. Products under development include tests which predict the risk of osteoporosis, coronary artery disease, diabetic retinopathy, asthma, pulmonary fibrosis, and meningitis/sepsis.

Every living organism has a unique "genome," a master blueprint of all the cellular structures and activities necessary to build and support life. A genome is a map of the organism's DNA, which is in part comprised of segments called "genes." Genes contain the specific sequences of information responsible for particular physiological traits and processes. Each gene contains a sequence of nucleotides which provide precise genetic instructions to create, or "express" a protein. Proteins are the primary building blocks of an organism's physiological characteristics. A typical human cell contains thousands of different proteins essential to its structure, growth and function. If even one

gene or single nucleotide is abnormal, it can severely alter the cell's function and result in a disease condition. Throughout the past decade, researchers have focused on discovering genes and sequencing the human genome to determine the order of nucleotides in a specific gene, permitting identification of the gene and the protein it produces using a variety of techniques. For example, scientists have used cDNA libraries, which contain copies of DNA with only the expressed portion of the gene, in conjunction with computer software to identify locations of genes within the genome. Recent advances have made these technologies operate in a high-throughput manner, causing the discovery of genes to become much more efficient and allowing researchers to focus on the functional aspects of genes. Understanding the functional aspects of genes permits the researchers to correlate those genes to medically relevant conditions. The efforts to discover and understand these functional aspects of the genes in the human genome are commonly referred to as "functional genomics." Identifying genes that may predispose a person to a particular disease may allow researchers to develop diagnostic tests for the disease permitting early diagnosis and more successful treatment. We believe that combining genetic susceptibility tests with specific therapeutic strategies results in improved clinical outcomes and more cost-effective disease management.

We also develop and license our medical research tools to pharmaceutical and biotech companies. For instance, BioFusion(R) is our proprietary computer modeling system that simulates complex diseases and allows researchers to identify useful information from the rapidly increasing genetic information databases that companies and academic centers worldwide generate.

We work with collaborative partners at the basic discovery stage. We use this strategy to obtain access to early-stage research and to reduce our up-front research expenses. Since 1994, we have had a strategic alliance with the Department of Molecular and Genetic Medicine at Sheffield University in the United Kingdom. Sheffield provides us with the fundamental discovery and genetic analysis from its research laboratories, and we focus on developing commercial uses for these discoveries.

We distribute PST through third party distributors. The Straumann Company and Kimball Genetics market PST in the United States and Puerto Rico. Straumann is a leading supplier of dental implants, and Kimball has expertise in processing genetic tests and analyzing their results. Hain Diagnostika/ADA GmbH distributes PST in all countries outside of North America and Japan. Hain has extensive experience in commercializing genetic tests in several fields, as well as a specific commitment to marketing products directly to dentists. Sales of PST have generated minimal revenues to date, and we do not know if or when PST will achieve commercial acceptance.

We collaborate with the University of Washington School of Dentistry in a study sponsored by Washington Dental Service. This study involves administering 1,200 PSTs, and we believe it will provide scientific and financial data regarding the use of PST as a treatment-planning tool to assess risk before actual periodontal damage occurs. We anticipate the data from the study will be available for analysis in 2001.

Our executive offices are located at 135 Beaver Street, Waltham, Massachusetts 02452, and our telephone number is 781/398-0700. We incorporated in Texas in 1986 and re-incorporated in Delaware in March 2000. We maintain a website at www.ilgenetics.com. The contents of our website are not part of this prospectus.

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RISK FACTORS

An investment in our common stock involves a high degree of risk. You

should read this entire prospectus together with the information incorporated by reference in this prospectus and you should give particular attention to the following risk factors before deciding to purchase shares of our common stock.

WE HAVE A HISTORY OF OPERATING LOSSES AND EXPECT THESE LOSSES TO CONTINUE IN THE FUTURE

We have experienced significant operating losses since our inception and expect these losses to continue for the foreseeable future. We incurred losses from operations of \$0.7 million in fiscal year 1996, \$4.1 million in 1997, \$9.8 million in 1998, \$6.2 million in 1999 and \$5.2 million in 2000. As of December 31, 2000, our accumulated deficit was \$31.0 million. Our losses result primarily from research and development and selling, general and administrative expenses. We have not generated significant revenues from product sales, and we do not know if we will ever generate significant revenues from product sales. We will need to generate significant revenues to continue our research and development programs and achieve profitability. We cannot predict when, if ever, we will achieve profitability.

IF WE FAIL TO OBTAIN ADDITIONAL CAPITAL, OR OBTAIN IT ON UNFAVORABLE TERMS, THEN WE MAY HAVE TO END OUR RESEARCH AND DEVELOPMENT PROGRAMS AND OTHER OPERATIONS

We anticipate that our current financial resources are adequate to maintain our current and planned operations through July 2002. If we cannot raise additional capital prior to July 2002, we will be unable to fund our business operations and probably declare bankruptcy.

Our future capital needs depend on many factors. We will need capital for the commercial launch of additional genetic tests, continued research and development efforts, obtaining and protecting patents and administrative expenses. Additional financing may not be available when needed, or, if available, it may not be available on favorable terms. If we cannot obtain additional funding on acceptable terms when needed, we may have to discontinue operations, or, at a minimum, curtail one or more of our research and development programs.

THE MARKET FOR GENETIC SUSCEPTIBILITY TESTS IS UNPROVEN

The market for genetic susceptibility tests is at an early stage of development and may not continue to grow. Both we and the general scientific community have only a limited understanding of the role of genes in predicting disease. When we identify a gene or genetic marker that may predict disease, we conduct clinical trials to confirm the initial scientific discovery and to establish the scientific discovery's clinical utility in the marketplace. The results of these clinical trials could limit or delay our ability to bring the test to market, reduce the test's acceptance by our customers or cause us to cancel the program, any of which limit or delay sales and cause additional losses. The only genetic susceptibility test we currently market is PST, and it has produced only minimal revenues to date. The marketplace may never accept our products, and we may never be able to sell our products at a profit. We may not complete development of or commercialize our other genetic susceptibility tests.

The success of our genetic susceptibility tests will depend upon their acceptance as medically useful and cost-effective by patients, physicians, dentists, other members of the medical and dental community and by third- party payors, such as insurance companies and the government. We can achieve broad market acceptance only with substantial education about the benefits and limitations of genetic susceptibility tests. Our tests may not gain market acceptance on a timely basis, if at all. If patients, dentists and physicians do not accept our tests, or take a longer time to accept them than we anticipate, then it will reduce our sales, resulting in additional losses.

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WE RELY HEAVILY ON THIRD PARTIES TO PERFORM SALES, MARKETING AND DISTRIBUTION FUNCTIONS ON OUR BEHALF, WHICH COULD LIMIT OUR EFFORTS TO SUCCESSFULLY MARKET PRODUCTS

We have limited experience and capabilities with respect to distributing, marketing and selling genetic susceptibility tests. We have relied and plan to continue to rely significantly on sales, marketing and distribution arrangements with third parties, over which we have limited influence. If these third parties do not successfully market our products, it will reduce our sales and increase our losses. If we are unable to negotiate acceptable marketing and distribution agreements with future third parties, or if in the future we elect to perform sales, marketing and distribution functions ourselves, we will incur significant costs and face a number of additional risks, including the need to recruit experienced marketing and sales personnel.

WE RELY HEAVILY ON THIRD PARTIES TO PERFORM RESEARCH AND DEVELOPMENT ON OUR BEHALF, WHICH COULD LIMIT OUR EFFORTS TO SUCCESSFULLY DEVELOP PRODUCTS

We have limited research and development capabilities. In July 1999, we entered into a new contractual arrangement with the University of Sheffield, replacing the research and development agreement that had been in place since 1996. Under our arrangement with Sheffield, we will undertake the business development and commercialization of discoveries resulting from Sheffield's research. The agreement is non-cancellable for those discoveries on which we and Sheffield have reached a specific business development agreement, but otherwise either party can end the arrangement upon six months' notice. If Sheffield ends our arrangement and we are unable to make alternative arrangements, our ability to develop new products will be significantly diminished, causing us to discontinue our operations. This agreement with Sheffield has a five-year term with an automatic yearly renewal. As part of this arrangement, we issued an aggregate of 475,000 shares of our common stock to Sheffield and its researchers in exchange for patent rights and other interests held by Sheffield and its researchers under our previous project agreements. Our agreement with Sheffield requires us to fund agreed upon research and development activities at the University of Sheffield on our behalf based upon annual budgets. This agreement automatically renews in one-year increments. We also entered into a five-year consulting agreement with Sheffield's key collaborator, Dr. Gordon Duff.

Reliance on third party research and development entails risks we would not be subject to if we performed this function ourselves. These risks include reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the agreement by the third party because of factors beyond our control and the possibility of termination or nonrenewals of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us. We may in the future elect to perform our own research and development, which will require us to raise substantial additional funds and recruit additional qualified personnel.

IF WE ARE UNSUCCESSFUL IN ESTABLISHING ADDITIONAL STRATEGIC ALLIANCES, OUR ABILITY TO DEVELOP AND MARKET PRODUCTS AND SERVICES WILL BE DAMAGED

Entering into strategic alliances for the development and commercialization of products and services based on our discoveries is an important element of our business strategy. We anticipate entering into additional collaborative arrangements with Sheffield and other parties in the future. We face significant competition in seeking appropriate collaborators. In addition, these alliance arrangements are complex to negotiate and time-consuming to document. If we fail to maintain existing alliances or establish additional strategic alliances or other alternative arrangements, then our ability to develop and market products and services will be damaged. In

addition, the terms of any future strategic alliances may be unfavorable to us or these strategic alliances may be unsuccessful.

IF WE FAIL TO OBTAIN AN ADEQUATE LEVEL OF REIMBURSEMENT FOR OUR PRODUCTS OR SERVICES BY THIRD PARTY PAYORS, THEN OUR PRODUCTS AND SERVICES WILL NOT BE COMMERCIALLY VIABLE

The availability and levels of reimbursement by governmental and other third party payors affect the market for any healthcare service. These third party payors continually attempt to contain or reduce the costs of healthcare by challenging the prices charged for medical products and services. Our ability to successfully commercialize our existing genetic susceptibility tests and others that we may develop depends on obtaining

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adequate reimbursement from third-party payors. The extent of third-party payor reimbursement will likely heavily influence physicians' and dentists' decisions to recommend genetic susceptibility tests, as well as patients' elections to pursue testing. If reimbursement is unavailable or limited in scope or amount, then we cannot sell our products and services profitably. In particular, third-party payors tend to deny reimbursement for services which they determine to be investigational in nature or which are not considered "reasonable and necessary" for diagnosis or treatment. To date, few third-party payors have agreed to reimburse patients for genetic susceptibility tests, and we do not know if third-party payors will, in the future, provide full reimbursement coverage for these genetic tests. If third-party payors do not provide adequate reimbursement coverage, then individuals may choose to directly pay for the test. If both third-party payors and individuals are unwilling to pay for the tests, then the number of tests we can sell will be significantly decreased, resulting in reduced revenues and additional losses.

IF WE FAIL TO OBTAIN PATENT PROTECTION FOR OUR PRODUCTS AND PRESERVE OUR TRADE SECRETS, THEN COMPETITORS MAY DEVELOP COMPETING PRODUCTS AND SERVICES, WHICH WILL DECREASE OUR SALES AND MARKET SHARE

Our success will partly depend on our ability to obtain patent protection, in the United States and in other countries, for our products and services. In addition, our success will also depend upon our ability to preserve our trade secrets and to operate without infringing upon the proprietary rights of third parties.

We have 22 U.S. patent applications pending and a number of foreign counterparts to these applications, including applications covering some of our anticipated genetic susceptibility tests. Our patent positions, and those of other pharmaceutical and biotechnology companies, are generally uncertain and involve complex legal, scientific and factual questions. Our ability to develop and commercialize products and services depends on our ability to:

- Obtain patents;
- Obtain licenses to the proprietary rights of others;
- Prevent others from infringing on our proprietary rights; and
- Protect trade secrets.

Our pending patent applications may not result in issued patents or any issued patents may never afford meaningful protection for our technology or products. Further, others may develop competing products which avoid legally infringing upon, or conflicting with, our patents. In addition, competitors may challenge any patents issued to us, and these patents may subsequently be narrowed, invalidated or circumvented.

We also rely on trade secrets and proprietary know-how that we seek to protect, in part, by confidentiality agreements. The third parties we contract with may breach these agreements, and we might not have adequate remedies for any breach. Additionally, our competitors may discover or independently develop our trade secrets.

THIRD PARTIES MAY OWN OR CONTROL PATENTS OR PATENT APPLICATIONS AND REQUIRE US TO SEEK LICENSES, WHICH COULD INCREASE OUR COSTS OR PREVENT US FROM DEVELOPING OR MARKETING OUR PRODUCTS OR SERVICES

We may not have rights under patents or patent applications which are related to our current or proposed products. Third parties may own or control these patents and patent applications in the United States and abroad. Therefore, in some cases, to develop or sell any proposed products or services, with patent rights controlled by third parties, we or our collaborators may seek, or may be required to seek, licenses under third-party patents and patent applications. If this occurs, we will pay license fees or royalties or both to the licensor. If licenses are not available to us on acceptable terms, we or our collaborators may be prohibited from developing or selling our products or services.

If third parties believe our products or services infringe upon their patents, they could bring legal proceedings against us seeking damages or seeking to enjoin us from testing, manufacturing or marketing our products or services. Any litigation could result in substantial expenses to us and significant diversion of attention by our technical and management personnel. Even if we prevail, the time, cost and diversion of resources of patent litigation would likely damage our business. If the other parties in any patent litigation brought against us are successful, in addition to any liability for damages, we may have to cease the infringing activity or obtain a license.

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TECHNOLOGICAL CHANGES MAY CAUSE OUR PRODUCTS AND SERVICES TO BE OBSOLETE

Our competitors may develop susceptibility tests that are more effective than our technologies or that make our technologies obsolete. Innovations in the treatment of the diseases in which we have products or product candidates could make our products obsolete. These innovations could prevent us from selling, and significantly reduce or eliminate the markets for, our products.

WE MAY BE DELISTED FROM NASDAQ RESULTING IN A LIMITED PUBLIC MARKET FOR OUR COMMON STOCK AND VOLATILITY IN OUR STOCK PRICE

Our common stock is currently listed on the Nasdaq SmallCap Market and the Boston Stock Exchange. During 1999, we received several notices from Nasdaq stating that we were not in compliance with their continued listing requirements. We believe that we currently comply with the continued listing requirements, but we have not been notified by Nasdaq that we are in compliance. Regardless, we may not be able to maintain our continued listing on the Nasdaq or the Boston Stock Exchange.

If Nasdaq or the Boston Stock Exchange delists our shares, then trading would be conducted in the over- the-counter market in the so-called "pink sheets" or the OTC Bulletin Board. Selling our common stock will be more difficult because of reduced trading volume and transaction size, transactions could be delayed, and security analysts' and news media's coverage, if any, of ILGN will be reduced. These factors may result in lower prices and larger spreads in the bid and ask prices for our shares. The delisting of our shares would also greatly impair our ability to raise additional necessary capital

through equity or debt financing.

Historically, our common stock has experienced low trading volumes. The market price of our common stock also has been highly volatile, and it may continue to be highly volatile, as has been the case with the securities of other public biotechnology companies. Factors such as announcements by us or by our competitors concerning technological innovations, new commercial products or procedures, proposed government regulations and developments or disputes relating to patents or proprietary rights are likely to affect the market price of our common stock. Changes in the market price of our common stock may bear no relation to our actual operational or financial results.

WE MAY BE PROHIBITED FROM FULLY USING OUR NET OPERATING LOSS CARRYFORWARDS, WHICH COULD AFFECT OUR FINANCIAL PERFORMANCE

As a result of the losses incurred in 1998, 1999 and 2000, we have not recorded a federal income tax provision for those years and have recorded a valuation allowance against all future tax benefits. As of December 31, 2000, we had net operating loss carryforwards of approximately \$23.3 million for federal income tax purposes, expiring in varying amounts through the year 2020. We also had a research tax credit of approximately \$317,000 at December 31, 2000, that expires in varying amounts through the year 2020. Our ability to use these net operating loss and credit carryforwards is subject to restrictions contained in the Internal Revenue Code which provide for limitations on our utilization of our net operating loss and credit carryforwards following a greater than 50% ownership change during the prescribed testing period. We experienced a change in ownership interest in June 1999. As a result, approximately \$15.6 million of our net operating loss carryforwards are limited in utilization to approximately \$825,000 annually. The annual limitation may result in the expiration of the carryforwards prior to utilization.

WE ARE SUBJECT TO INTENSE COMPETITION FROM COMPANIES, WHICH MAY DAMAGE OUR BUSINESS

Our industry is highly competitive. Our competitors in the United States and abroad are numerous and include major pharmaceutical and diagnostic companies, specialized biotechnology firms, universities and other research institutions, including those receiving funding from the Human Genome Project. Many of our competitors have considerably greater financial resources, research and development staffs, facilities, technical personnel, marketing and other resources than we do. Furthermore, many of these competitors are more experienced than we are in discovering, commercializing and marketing products. These greater resources may allow our competitors to discover important genes or genetic markers before we do. If we, in conjunction with the University of Sheffield, do not discover disease predisposing genes and commercialize these discoveries before our competitors, then our

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ability to generate sales and revenues will be reduced or eliminated, and could make our products obsolete. We expect competition to intensify in our industry as technical advances are made and become more widely known.

WE ARE SUBJECT TO GOVERNMENT REGULATION WHICH MAY SIGNIFICANTLY INCREASE OUR COSTS AND DELAY INTRODUCTION OF FUTURE PRODUCTS

The sale, performance or analysis of our genetic tests do not currently require FDA or regulatory authority approval. Changes in existing regulations could require advance regulatory approval of genetic susceptibility tests, resulting in a substantial curtailment or even prohibition of our activities without regulatory approval. If our genetic tests ever require regulatory

approval, then the costs of introduction will increase and marketing and sales of products may be significantly delayed.

WE MAY BE SUBJECT TO PRODUCT LIABILITY CLAIMS THAT ARE COSTLY TO DEFEND AND THAT COULD LIMIT OUR ABILITY TO USE SOME TECHNOLOGIES IN THE FUTURE

The design, development, manufacture and use of our genetic susceptibility tests involve an inherent risk of product liability claims and associated adverse publicity. Producers of medical products face substantial liability for damages in the event of product failure or allegations that the product caused harm. We currently maintain product liability insurance, but it is expensive and difficult to obtain and may not be available in the future on economically acceptable terms. We may become subject to product liability claims which, even if they are without merit, could result in significant legal defense costs. We could be held liable for damages in excess of the limits of our insurance coverage, and any claim or resulting product recall could create significant adverse publicity.

ETHICAL, LEGAL AND SOCIAL ISSUES RELATED TO GENETIC TESTING MAY REDUCE DEMAND FOR OUR PRODUCTS

Genetic testing has raised issues regarding the appropriate utilization and the confidentiality of information provided by genetic testing. Genetic tests for assessing a person's likelihood of developing a chronic disease have focused public attention on the need to protect the privacy of genetic assessment medical information. For example, concerns have been expressed that insurance carriers and employers may use these tests to discriminate on the basis of genetic information, resulting in barriers to the acceptance of genetic tests by consumers. This could lead to governmental authorities prohibiting genetic testing or calling for limits on or regulating the use of genetic testing, particularly for diseases for which there is no known cure. Any of these scenarios would decrease demand for our products and result in substantial losses.

OUR DEPENDENCE ON KEY EXECUTIVES AND SCIENTISTS COULD ADVERSELY IMPACT THE DEVELOPMENT AND MANAGEMENT OF OUR BUSINESS

Our success substantially depends on the ability, experience and performance of our senior management and other key personnel. If we lose one or more of the members of our senior management or other key employees, it could damage our development programs and our business. In addition, our success depends on our ability to continue to hire, train, retain and motivate skilled managerial and scientific personnel. The pool of personnel with the skill that we require is limited. Competition to hire from this limited pool is intense. We compete with numerous pharmaceutical and health care companies, as well as universities and nonprofit research organizations in the highly competitive Boston, Massachusetts business area. Loss of the services of Dr. Phillip J. Reilly, our Chairman and CEO, Dr. Kenneth Kornman, our President, or Dr. Paul M. Martha, our Chief Medical Officer, could delay our research and development programs and damage our business. We have entered into employment agreements with three to five year terms with Drs. Reilly, Kornman and Martha. Any of these employees can terminate his employment upon 30 days notice. We do not maintain key man life insurance on any of our personnel.

BECAUSE OUR PRINCIPAL SHAREHOLDERS, OFFICERS AND DIRECTORS CONTROL A LARGE PERCENTAGE OF OUR VOTING POWER, OTHER STOCKHOLDERS' VOTING POWER MAY BE LIMITED

As of February 1, 2001, our directors, executive officers and certain of their affiliates beneficially owned approximately 20% of our outstanding common stock. Accordingly, these shareholders, individually and as a group, may be able to influence the outcome of shareholder votes, including votes concerning the election of

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directors, the adoption or amendment of provisions in our Certificate of Incorporation or By-Laws and the approval of certain mergers and other significant corporate transactions, including a sale of substantially all of our assets. These shareholders may make decisions that are adverse to other shareholders' interests. This ownership concentration may also adversely affect the market price of our common stock.

WE DO NOT EXPECT TO PAY DIVIDENDS FOR THE FORESEEABLE FUTURE AND YOU SHOULD NOT EXPECT TO RECEIVE ANY FUNDS WITHOUT SELLING YOUR SHARES, WHICH YOU MAY ONLY BE ABLE TO DO AT A LOSS

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Therefore, you should not expect to receive any funds without selling your shares, which you may only be able to do at a loss.

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AVAILABLE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any reports, statements or other information that we file at the Securities and Exchange Commission's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call 1-800-SEC-0330 for further information on the operation of Public Reference Room. Our Securities and Exchange Commission filings are also available to the public at the Securities and Exchange Commission's web site at http://www.sec.gov.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, except for any information that is superseded by other information that is contained in this document or in later filed documents incorporated by reference in this prospectus. We incorporate by reference the documents listed below and any future filings we make with the Securities and Exchange Commission under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and prior to the time that all of the securities offered by this prospectus are sold.

- (1) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2000;
 - (2) Our Current Report on Form 8-K filed March 7, 2001;
- (3) Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2001; and
- (4) The description of our common stock contained in Item 1 of our Registration Statement on Form 8-A dated December 15, 1997.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Interleukin Genetics, Inc.

135 Beaver Street

Waltham, Massachusetts 02452 Attention: Investor Relations

Telephone: 781/398-0700

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. You should not assume that the information contained in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of this prospectus. We are not making an offer of our common stock in any state where the offer is prohibited. In this prospectus, "Interleukin Genetics, " "we, " "our" and "us" refer to Interleukin Genetics, Inc.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain forward-looking statements including, without limitation, statements concerning our expectations of future sales, research and development expenses, selling, general and administrative expenses, product introductions and cash requirements. Forward-looking statements often, although not always, include words or phrases such as "will likely result," "expect," "will continue," "anticipate," "estimate," "intend," "plan," "project," "outlook" or similar expressions. Our actual results may vary materially from those expressed in these forward-looking statements. Factors that could cause actual results to differ from expectations include those contained in the section entitled "Risk Factors." Our results of operations might be adversely affected by one or more of these factors.

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USE OF PROCEEDS

The shares being offered by this prospectus are owned by our shareholders or may be issued upon the exercise of warrants held by our shareholders. We may receive up to \$2,202,544 upon exercise of the warrants. For further information see the following section entitled "Selling Shareholders" and the section entitled "Plan of Distribution" on page 11 of this prospectus.

SELLING SHAREHOLDERS

The following table presents information about the number of shares of our common stock beneficially owned by each of the selling shareholders:

- the number of shares each selling shareholder beneficially owns as of February 1, 2001;
- the percentage of our outstanding shares of common stock each selling shareholder beneficially owns before this offering;
- the number of shares each selling shareholder is offering by this prospectus;
- the number of shares each selling shareholder will beneficially own after the completion of this offering; and
- the percentage of our outstanding shares of common stock each selling shareholder will beneficially own after the completion of this offering.

BENEFICIAL OWNERSHIP BEFORE THE OFFERING

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| | NUMBER | PERCENTAGE | SHARES BEING | NU |
|--|----------------------------|--------------|--------------------------|----|
| NAME | OF SHARES | OF CLASS(2) | OFFERED | OF |
| The Tail Wind Fund Ltd. Special Situations Fund III L.P. Special Situations Private Equity | 1,064,407(3) 990,000(5) | 5.1% 4.7% | 386,441(4) 990,000(5) | 67 |
| Fund L.P Special Situations Cayman Fund L.P. | 480,000(6) 330,000(7) | 2.3% 1.6% | 480,000(6) 330,000(7) | |

- (1) Assumes all of the shares offered by this prospectus are sold and no selling shareholder acquires any of our shares subsequent to the date of this prospectus and prior to the completion of this offering.
- (2) Based on 20,242,800 shares of common stock of the Company outstanding as of February 1, 2001.
- (3) Includes 264,407 shares of common stock issuable upon exercise of a warrant.
- (4) Includes 128,814 shares of common stock is suable upon exercise of a warrant.
- (5) Includes 330,000 shares of common stock issuable upon exercise of a warrant.
- (6) Includes 160,000 shares of common stock issuable upon exercise of a warrant.
- (7) Includes 110,000 shares of common stock issuable upon exercise of a warrant.

In January 2001 we completed a private placement in which we issued 1,200,000 shares of our common stock and warrants to purchase up to 600,000 shares of our common stock to three of the selling shareholders. In addition, as part of the terms of a private placement we completed in December 2000, following the completion of the January 2001 private placement we issued an additional 257,627 shares of our common stock and a warrant to purchase up to 128,814 shares of our common stock to a selling shareholder. All of these shares are being offered by this prospectus. None of the selling shareholders has had a material relationship with us within the past three years other than as a result of their acquisition of our shares in these private placements.

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PLAN OF DISTRIBUTION

We completed a private placement in January 2001 in which three of the selling shareholders acquired 1,200,000 shares of our common stock and warrants to purchase 600,000 shares of our common stock. Under the terms of a private placement we completed in December 2000, following the January 2001 private placement, we also issued 257,627 shares of our common stock and a warrant to purchase 128,814 shares of our common stock to one of the selling shareholders. We are registering all 2,186,441 of these shares on behalf of the selling shareholders. We may receive up to \$2,202,544 upon exercise of these warrants. As used in this prospectus, the term "selling shareholders" includes the selling shareholders named in the table on the previous page and donees, pledgees, transferees or other successors—in—interest selling shares received from a selling shareholder as a gift, pledge, partnership distribution or other

non-sale related transfer after the date of this prospectus. If we are notified by a selling shareholder that a donee, pledgee, transferee or other successor-in-interest intends to sell more than 500 shares, a supplement to this prospectus will be filed.

Each selling shareholder will act independently of us in making decisions with respect to the timing, manner and size of each sale. Each selling shareholder may sell the shares from time to time and may also choose not to sell all the shares they are allowed to sell by this prospectus. The sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at terms and market prices prevailing at the time of the sale, at prices related to the then prevailing market prices or in negotiated transactions, including an underwritten offering or one or more of the following methods:

- a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal in order to facilitate the transaction,
- purchases by a broker or dealer as principal and resale by the broker or dealer for its account pursuant to this prospectus,
- an exchange distribution in accordance with the rules of an exchange,
- ordinary brokerage transactions and transactions in which the broker solicits purchasers, and
- privately negotiated transactions.

A selling shareholder may engage broker-dealers who in turn may arrange for other broker-dealers to participate. Broker-dealers may receive commissions or discounts from a selling shareholder in amounts to be negotiated immediately prior to the sale. In addition, underwriters or agents may receive compensation from a selling shareholder or from purchasers of the shares for whom they may act as agents, in the form of discounts, concessions or commissions. Underwriters may sell shares to or through dealers, and these dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they act as agents. Each selling shareholder, underwriter, broker, dealer and agent that participates in the distribution of the shares may be deemed to be underwriters, and any discounts or commissions received by them from a selling shareholder and any profit on the resale of the shares by them may be deemed to be underwriting discounts and commissions under the Securities Act of 1933.

To the extent required, we may amend or supplement this prospectus from time to time to describe a specific plan of distribution, which amendment or supplement will identify the aggregate amount of shares of our common stock being offered and the terms of the offering. The amendment or supplement will also disclose the following information:

- the name or names of any underwriters, dealers or agents,
- the purchase price paid by any underwriter for shares of our common stock purchased from a selling shareholder,
- any discounts, commissions and other items constituting compensation from a selling shareholder and/or Interleukin Genetics, and
- any discounts, commissions or concessions allowed or reallowed or paid to dealers, including the proposed selling price to

the public.

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We have agreed to indemnify the selling shareholders in certain circumstances against certain liabilities, including liabilities under the Securities Act. The selling shareholders have agreed to indemnify us in certain circumstances against certain liabilities, including liabilities under the Securities Act.

The selling shareholders may enter into hedging transactions with broker-dealers in connection with distributions of shares or otherwise. In these transactions, broker-dealers may engage in short sales of shares in the course of hedging the positions they assume with selling shareholders. The selling shareholders also may sell shares short and redeliver shares to close out these short positions. The selling shareholders may enter into option or other transactions with broker-dealers which require the delivery of shares to the broker-dealer. The broker-dealer may then resell or otherwise transfer these shares pursuant to this prospectus. The selling shareholders also may loan or pledge shares to a broker-dealer. The broker-dealer may sell the shares so loaned, or upon a default the broker- dealer may sell the shares so pledged, pursuant to this prospectus.

The selling shareholders also may resell all or a portion of shares of our common stock being offered by this prospectus in open market transactions in reliance upon Rule 144 under the Securities Act, provided it meets the criteria and conforms to the requirements of this Rule.

Under applicable rules and regulations under the Exchange Act of 1934, any person engaged in the distribution of shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of a distribution. In addition, each selling shareholder will be subject to applicable provisions of the Exchange Act of 1934 and the associated rules and regulations under the Exchange Act of 1934, including Regulation M, which provisions may limit the timing of purchases and sales of shares of our common stock by the selling shareholders. We will make copies of this prospectus available to the selling shareholders. We have informed them of the need for delivery of copies of this prospectus to purchasers at or prior to the time of any sale of the shares.

In order to comply with certain states' securities laws, if applicable, shares of our common stock will be sold in those states only through registered or licensed brokers or dealers. Shares of our common stock may not be sold in some states unless these shares have been registered or qualified for sale in those states, unless an exemption from registration or qualification is available and is obtained.

We are bearing all out-of-pocket expenses incurred in connection with the registration of the resale of the shares of our common stock, including, without limitation, all registration and filing fees imposed by the Securities and Exchange Commission, The Nasdaq Stock Market, Inc. and blue sky laws, printing expenses, transfer agents' and registrars' fees, and the fees and disbursements of our outside counsel and independent public accountants. The selling shareholders will bear all underwriting discounts and commissions and transfer or other taxes.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Section 145 of the Delaware General Corporation Law or the DGCL, provides that a Delaware corporation may indemnify any person who was or is a

party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "proceeding") (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. A Delaware corporation may indemnify any person under Section 145 in connection with a proceeding by or in the right of the corporation to procure judgment in its favor, as provided in the preceding sentence, against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action, except that no indemnification shall be made in respect thereof unless, and then only to the extent that, a court of competent jurisdiction shall determine upon application that such person is fairly and reasonably entitled

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to indemnity for such expenses as the court shall deem proper. A person is fairly and reasonably entitled to indemnity for such expenses as the court shall deem proper. A Delaware corporation must indemnify any person who was successful on the merits or otherwise in defense of any action, suit or proceeding or in defense of any claim, issue or matter in any proceeding, by reason of the fact that he is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation, against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the proceeding. A Delaware corporation may pay for the expenses (including attorneys' fees) incurred by an officer or director in defending a proceeding in advance of the final disposition upon receipt of an undertaking by or on behalf of such officer or director to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the corporation.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director shall not be personally liable to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for any acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) in respect of certain unlawful dividend payments or stock redemptions or repurchases, or (iv) for any transaction from which the director derived an improper personal benefit. Article Six of our Certificate of Incorporation eliminates the liability of directors to the fullest extent permitted by the DGCL. The DGCL permits the purchase of insurance on behalf of directors and officers against any liability asserted against directors and officers and incurred by such persons in such capacity, or arising out of their status as such, whether or not the corporation would have the power to indemnify directors and officers against such liability.

We also have a policy insuring our directors and officers against certain liabilities, including liabilities under the Securities Act.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors and officers and controlling persons as described in the provisions above, we have been advised that, in the opinion of the Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

LEGAL MATTERS

The validity of the securities offered by this prospectus is being passed upon by Fulbright & Jaworski L.L.P., counsel to Interleukin Genetics.

EXPERTS

The consolidated financial statements included in the Company's Annual Report on Form 10-K for the years ended December 31, 1998, 1999 and 2000, incorporated by reference in this prospectus and elsewhere in the registration statement have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their reports with respect thereto, and are included in this prospectus in reliance upon the authority of Arthur Andersen LLP as experts in giving said reports.

CHANGE AFTER THAT DATE.

WE HAVE NOT AUTHORIZED ANY PERSON TO MAKE A STATEMENT THAT DIFFERS FROM WHAT IS IN THIS PROSPECTUS. IF ANY PERSON DOES MAKE A STATEMENT THAT DIFFERS FROM WHAT IS IN THIS PROSPECTUS, YOU SHOULD NOT RELY ON IT. THIS PROSPECTUS IS NOT AN OFFER TO SELL, NOR IS IT SEEKING AN OFFER TO BUY, OUR COMMON STOCK IN ANY STATE IN WHICH THE OFFER OR SALE IS NOT PERMITTED. THE INTERLEUKIN GENETICS, INC. INFORMATION IN THIS PROSPECTUS IS COMPLETE AND ACCURATE AS OF ITS DATE, BUT THE INFORMATION MAY

2,186,441 SHARES

COMMON STOCK

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