INTERLEUKIN GENETICS INC Form SC 13D/A July 25, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 5)

INTERLEUKIN GENETICS, INC.

(Name of Issuer)

Common Stock \$.001 Par Value

(Title of Class of Securities)

458738101

(CUSIP Number)

Warner Norcross & Judd LLP 900 Fifth Third Center 111 Lyon Street, N.W. Grand Rapids, Michigan 49503-2487 Attention: Gordon R. Lewis Telephone (616) 752-2752

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

July 2, 2007

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box, o

(Continued on the following pages)

(Page 1 of 13 Pages)

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

SCHEDULE 13D

CUSIP NO. 458738101

			ING PERSONS ON NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Pyxis Innovation		ON NOS. OF ABOVE PERSONS (ENTITIES ONLT)	
2	CHECK THE A	APPRO	PRIATE BOX IF A MEMBER OF A GROUP (a) X	
			(b) o	
3	SEC USE ONI	Υ		
4	SOURCE OF I	FUNDS		
				AF
5	CHECK IF DIS	SCLOS	URE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) O	
6				
6	CITIZENSHIP	OR PL	ACE OF ORGANIZATION	
6	CITIZENSHIP	OR PL	ACE OF ORGANIZATION	Delaware
	CITIZENSHIP NUMBER OF	OR PL	ACE OF ORGANIZATION SOLE VOTING POWER	Delaware
				Delaware 34,970,525
	NUMBER OF			
	NUMBER OF SHARES	7	SOLE VOTING POWER	
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH	7	SOLE VOTING POWER	34,970,525
E	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING	7 8	SOLE VOTING POWER SHARED VOTING POWER	34,970,525
E	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH	7 8	SOLE VOTING POWER SHARED VOTING POWER	34,970,525

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		34,970,525
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	o
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
		58.5%
14	TYPE OF REPORTING PERSON	
		СО

SCHEDULE 13D

CUSIP NO. 458738101

		TING PERSONS ION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
Alticor Inc.			
2 CHECK THE	E APPRO	OPRIATE BOX IF A MEMBER OF A GROUP	
		(a) X (b) O	
3 SEC USE ON	NLY		
4 SOURCE OF	FUNDS	<u> </u>	
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5 CHECK IF D	SCLOS	URE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) 0
6 CITIZENSHI	IP OR PL	LACE OF ORGANIZATION	_
			Michigan
NUMBER OF	7	SOLE VOTING POWER	
SHARES			34,970,525
BENEFICIALLY	8	SHARED VOTING POWER	
OWNED BY			0
EACH	9	SOLE DISPOSITIVE POWER	
REPORTING	,	SOLL DISTOSTITVE FOWER	24.070.525
PERSON WITH			34,970,525
	10	SHARED DISPOSITIVE POWER	
			0

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		34,970,525
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	o
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
		58.5%
14	TYPE OF REPORTING PERSON	
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SCHEDULE 13D

CUSIP NO. 458738101

		TING PERSONS	
		ON NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
Alticor Holdin	gs Inc.		
2 CHECK THE	APPRO	PRIATE BOX IF A MEMBER OF A GROUP	
		(a) X (b) O	
3 SEC USE ONI	LY		
4 SOURCE OF I	FUNDS		
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5 CHECK IF DI	SCLOS	URE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) O	
6 CITIZENSHIF	OR PL	ACE OF ORGANIZATION	
			Michigan
NUMBER OF	7	SOLE VOTING POWER	
SHARES			34,970,525
BENEFICIALLY	8	SHARED VOTING POWER	
OWNED BY			0
EACH	9	SOLE DISPOSITIVE POWER	
REPORTING			34,970,525
PERSON WITH	10	SHARED DISPOSITIVE POWER	
			0

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		34,970,525
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	o
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
		58.5%
14	TYPE OF REPORTING PERSON	_
		НС

SCHEDULE 13D

CUSIP NO. 458738101

1			RTING PERSONS TION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Alticor Glob	al Hold	lings Inc.	
2	CHECK TH	E APPF	ROPRIATE BOX IF A MEMBER OF A GROUP (a) X	
			(b) o	
3	SEC USE O	NLY		
4	SOURCE O	F FUNI	DS .	
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5	CHECK IF I	DISCLO	OSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) O	
6	CITIZENSH	IIP OR	PLACE OF ORGANIZATION	
				Delaware
	NUMBER OF	7	SOLE VOTING POWER	
	SHARES			34,970,525
	BENEFICIALLY	8	SHARED VOTING POWER	
	OWNED BY			0
	EACH	9	SOLE DISPOSITIVE POWER	
	REPORTING			34,970,525
	PERSON WITH	10	SHARED DISPOSITIVE POWER	
				0

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		34,970,525
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	0
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
		58.5%
14	TYPE OF REPORTING PERSON	
		НС

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This Amendment No. 5 amends Amendment No. 4 to Schedule 13D of Pyxis Innovations Inc. ("Pyxis"), Alticor Inc., Alticor Holdings Inc. and Alticor Global Holdings Inc. filed August 28, 2006 ("Amendment No. 4"), which amended their Amendment No. 3 filed June 6, 2006 ("Amendment No. 3"), which amended their Amendment No. 2 filed September 24, 2004 ("Amendment No. 2"), which amended their Amendment No. 1 filed July 22, 2003 ("Amendment No. 1"), which amended their initial Statement on Schedule 13D filed March 14, 2003 ("Initial Schedule 13D"), relating to the Issuer's securities. Amendment No. 4, Amendment No. 3, Amendment No. 2, Amendment No. 1 and the Initial Schedule 13D are collectively referred to in this Amendment as the "Previous Filings." To the extent any item is superseded by a later filing, the later filing is operative and controlling.

Explanatory Note

This Amendment is filed for the purpose of providing information regarding changes in the membership of the Issuer's board of directors, and the appointment of an interim Chief Executive Officer of the Issuer.

Item 1. Security and Issuer

Name	οf	Issuer:
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Interleukin Genetics, Inc.

Title of Class of Equity Securities:

Common Stock \$.001 Par Value

Address of Issuer's Principal Executive Office:

135 Beaver Street Waltham, MA 02452

Item 2. Identity and Background

The contents of Item 2 of Amendment No. 4 are hereby incorporated by reference.

Item 4. Purpose of Transaction

The information set forth in Item 4 of the Previous Filings is incorporated herein by reference.

On July 2, 2007, Pyxis, as the holder of Series A preferred stock of the Issuer, elected James Weaver as a director of the Issuer.

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On July 3, 2007, the Issuer announced the appointment of Thomas Curran, the Issuer's Chairman of the Board, as Interim Chief Executive Officer.

Except as otherwise disclosed in its Previous Filings, as of the date of this filing none of the reporting persons has any plans or proposals of the type enumerated in Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

(a) Pyxis beneficially owns 34,970,525 shares of the Issuer's stock, which is 58.5% of the sum of the number of the Issuer's Common Stock that was outstanding as of March 31, 2007 (as reported in the Issuer's most recent Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission) and the number of shares that would have been outstanding upon conversion of all of the preferred stock and convertible notes held by Pyxis at that time.

Alticor Inc., Alticor Holdings Inc., and Alticor Global Holdings Inc., may be deemed to beneficially own the same 34,970,525 shares of the Issuer's stock.

The number of shares reported in this Item 5(a) includes 2,750,037 shares of Common Stock owned directly by Pyxis, 28,160,200 shares of Common Stock issuable to Pyxis upon conversion of its 5,000,000 shares of Series A Preferred Stock and 4,060,288 shares of Common Stock issuable to Pyxis upon conversion of the convertible notes (as of March 31, 2007) described in the Initial Schedule 13D and Amendment No. 1. In determining Pyxis' beneficial ownership percentage above, a division calculation is used wherein 34,970,525 is the numerator and the denominator is equal to the sum of: (a) all shares of Common Stock outstanding (as reported by the Issuer), (b) 28,160,200 shares reserved for issuance upon the conversion of the Series A Preferred Stock, and (c) 4,060,288 shares reserved for issuance upon the conversion of the convertible notes.

The calculations in this Item 5(a) are based on the Issuer having 27,601,644 shares of Common Stock outstanding as of March 31, 2007, as reported in the Issuer's most recent Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission. In addition, these calculations assume no outstanding options or other rights to obtain Common Stock have been exercised by their holders except as otherwise indicated by the Issuer. All information stated in this paragraph was provided by the Issuer.

None of the other persons named in response to Item 2 of this Schedule 13D is the beneficial owner of the Common Stock except to the extent beneficial ownership of shares owned by Pyxis may be attributed to such person.

(b) Pyxis holds the sole power to vote and dispose of the securities of Issuer that it holds. Alticor Inc., Alticor Holdings Inc., and Alticor Global Holdings Inc. have the power to direct the voting and disposition of the securities of the Issuer held by Pyxis by virtue of their direct or indirect control of Pyxis.

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- (c) There have been no transactions in the Issuer's Common Stock by any of the reporting persons since August 17, 2006.
 - (d) Not applicable.
 - (e) Not applicable.

The responses to (a) of this Item 5 are "Not Applicable" for the Directors and Officers. The responses to paragraph (b) and (c) of this Item 5 are "Not Applicable" and "None", respectively, for Alticor Inc., Alticor Holdings Inc., Alticor Global Holdings Inc., and the Directors and Officers.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

The contents of Item 6 of the Initial Schedule 13D and Item 5 of this Amendment No. 5 are here incorporated by reference.

Item 7. Material to Be Filed as Exhibits

- 99.1 Stock Purchase Agreement dated March 5, 2003 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 10.1 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.2 Registration Rights Agreement dated March 5, 2003 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 10.8 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.3 Certificate of Designations, Preferences and Rights of the Series A Preferred Stock of Interleukin Genetics, Inc. filed with the Delaware Secretary of State (hereby incorporated by reference to Exhibit 3.1 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.4 Amendment No. 3 to Note Purchase Agreement dated March 5, 2003 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 10.2 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.5 Amendment No. 2 to Security Agreement dated March 5, 2003 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 10.3 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.6 Exclusive License Agreement dated March 5, 2003 between Interleukin Genetics, Inc. and Access Business Group International LLC (hereby incorporated by reference to Exhibit 10.7 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.7 Research Agreement dated March 5, 2003 between Interleukin Genetics, Inc. and Access Business Group LLC (hereby incorporated by reference to Exhibit 10.6 to the Issuer's Form 8-K filed on March 5, 2003)
- 99.8 Letter of Guaranty dated March 5, 2003 from Alticor Inc. (hereby incorporated by reference to Exhibit 10.14 to the Issuer's Form 8-K filed on March 5, 2003)

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- 99.9 Joint Filing Agreement dated September 24, 2004 between Pyxis Innovations Inc., Alticor Inc., Alticor Holdings Inc., and Alticor Global Holdings Inc. (hereby incorporated by reference to Exhibit 99.9 to Amendment No. 2 filed on September 24, 2004)
- 99.10 Amendment No. 4 to Note Purchase Agreement dated February 23, 2006 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 10.1 to the Issuer's Quarterly Report on Form 10-Q filed on May 10, 2006)
- 99.11 Amendment No. 5 to Note Purchase Agreement dated August 17, 2006 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 99.11 to Amendment No. 4 filed August 17, 2006).
- 99.12 Stock Purchase Agreement dated August 17, 2006 between Interleukin Genetics, Inc. and Pyxis Innovations Inc. (hereby incorporated by reference to Exhibit 99.12 to Amendment No. 4 filed August 17, 2006).

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SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

•		
Dated: July 24, 2007	PYXIS INNOVATIONS INC.	
	By: /s/ Kim S. Mitchell	
	Kim S. Mitchell, Assistant Secretary	
Dated: July 24, 2007	ALTICOR INC.	
	By: /s/ Kim S. Mitchell	
	Kim S. Mitchell, Assistant Secretary	
Dated: July 24, 2007	ALTICOR HOLDINGS INC.	
	By: /s/ Kim S. Mitchell	
	Kim S. Mitchell, Assistant Secretary	
Dated: July 24, 2007	ALTICOR GLOBAL HOLDINGS INC.	
	By: /s/ Kim S. Mitchell	
	Kim S. Mitchell, Assistant Secretary	