APPLIED GENETIC TECHNOLOGIES CORP Form SC 13G/A February 14, 2017

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(AMENDMENT NO 2)*

Applied Genetic Technologies Corporation

(Name of Issuer)

Common Stock

(Title of Class of Securities)

03820J 10 0

(CUSIP Number)

December 31, 2016

(Date of Event which Requires Filing of this Statement)

Check the appr	opriate box to	designate the	e rule pursuant	to which this	Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person s initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in 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 (however, see the Notes).

Page 1 of 15 Pages

Cusip No. 03820J 10 0 13G Page 2 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) InterWest Partners VIII, LP 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION California 5 SOLE VOTING POWER NUMBER OF 1,412,432 (1) 6 SHARED VOTING POWER **SHARES BENEFICIALLY OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 1,412,432 (1) 8 SHARED DISPOSITIVE POWER WITH 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 1,412,432 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES: 10

11	PERCENT OF	CLASS REPRESENTED	BY AMOUNT IN ROW (9)	

7.8%

12 TYPE OF REPORTING PERSON

PN

(1) The shares are owned by IWP VIII and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants. IMP VIII serves as the general partner of IWP VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, and may be deemed to own beneficially the shares held by IWP VIII.

Page 2 of 15 Pages

Cusip No. 03820J 10 0 13G Page 3 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) InterWest Investors VIII, LP 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION California 5 SOLE VOTING POWER NUMBER OF 11,271 (1) 6 SHARED VOTING POWER **SHARES BENEFICIALLY OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 11,271 (1) 8 SHARED DISPOSITIVE POWER WITH 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 11,271 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES: 10

- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
- Less than 0.1%

 TYPE OF REPORTING PERSON

PN

(1) The shares are owned by II VIII and include: (i) 11,180 shares of Common Stock and (ii) 91 shares of Common Stock issuable pursuant to common stock purchase warrants. IMP VIII serves as the general partner of II VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by II VIII, and may be deemed to own beneficially the shares held by II VIII.

Page 3 of 15 Pages

Cusip No. 03820J 10 0 13G Page 4 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) InterWest Investors Q VIII, LP CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION California 5 SOLE VOTING POWER NUMBER OF 40,408 (1) 6 SHARED VOTING POWER **SHARES BENEFICIALLY OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 40,408 (1) 8 SHARED DISPOSITIVE POWER WITH 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 40,408 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES: 10

0.2%

12 TYPE OF REPORTING PERSON

PN

(1) The shares are owned by IIQ VIII and include: (i) 40,080 shares of Common Stock and (ii) 328 shares of Common Stock issuable pursuant to common stock purchase warrants. IMP VIII serves as the general partner of IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IIQ VIII, and may be deemed to own beneficially the shares held by IIQ VIII.

Page 4 of 15 Pages

13G Page 5 of 15 Pages Cusip No. 03820J 10 0 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) InterWest Management Partners VIII, LLC (the General Partner of InterWest Partners VIII, LP, InterWest Investors VIII, LP, and InterWest Investors Q VIII, LP) 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION California 5 SOLE VOTING POWER NUMBER OF 1,464,111 (1) 6 SHARED VOTING POWER **SHARES BENEFICIALLY** 0 OWNED BY SOLE DISPOSITIVE POWER REPORTING **PERSON** 1,464,111 (1) 8 SHARED DISPOSITIVE POWER **WITH** 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 1,464,111 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
 - 8.1%
- 12 TYPE OF REPORTING PERSON

OO

(1) The shares are owned by IWP VIII, II VIII and IIQ VIII, and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants held by IWP VIII, (iii) 11,180 shares of Common Stock and (iv) 91 shares of Common Stock issuable pursuant to common stock purchase warrants held by II VIII, and (v) 40,080 shares of Common Stock and (vi) 328 shares of Common Stock issuable pursuant to common stock purchase warrants held by IIQ VIII. IMP VIII serves as the general partner of IWP VIII, II VIII and IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, II VIII, and IIQ VIII, and may be deemed to own beneficially the shares held by IWP VIII, II VIII, and IIQ VIII.

Page 5 of 15 Pages

Cusip No. 03820J 10 0 13G Page 6 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) Harvey B. Cash (a Managing Director of InterWest Management Partners VIII) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION **United States** 5 SOLE VOTING POWER NUMBER OF 0 6 SHARED VOTING POWER **SHARES BENEFICIALLY** 1,464,111 (1) **OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 0 SHARED DISPOSITIVE POWER WITH 1,464,111 (1) 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,464,111 (1) 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.1%

12 TYPE OF REPORTING PERSON

IN

(1) The shares are owned by IWP VIII, II VIII and IIQ VIII, and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants held by IWP VIII, (iii) 11,180 shares of Common Stock and (iv) 91 shares of Common Stock issuable pursuant to common stock purchase warrants held by II VIII, and (v) 40,080 shares of Common Stock and (vi) 328 shares of Common Stock issuable pursuant to common stock purchase warrants held by IIQ VIII. IMP VIII serves as the general partner of IWP VIII, II VIII and IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, II VIII, and IIQ VIII, and may be deemed to own beneficially the shares held by IWP VIII, II VIII, and IIQ VIII.

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Harvey B. Cash that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

Page 6 of 15 Pages

Cusip No. 03820J 10 0 13G Page 7 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) Philip T. Gianos (a Managing Director of InterWest Management Partners VIII, LLC) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION **United States** 5 SOLE VOTING POWER NUMBER OF 0 6 SHARED VOTING POWER **SHARES BENEFICIALLY** 1,464,111 (1) **OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 0 SHARED DISPOSITIVE POWER WITH 1,464,111 (1) 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,464,111 (1) 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.1%

12 TYPE OF REPORTING PERSON

IN

(1) The shares are owned by IWP VIII, II VIII and IIQ VIII, and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants held by IWP VIII, (iii) 11,180 shares of Common Stock and (iv) 91 shares of Common Stock issuable pursuant to common stock purchase warrants held by II VIII, and (v) 40,080 shares of Common Stock and (vi) 328 shares of Common Stock issuable pursuant to common stock purchase warrants held by IIQ VIII. IMP VIII serves as the general partner of IWP VIII, II VIII and IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, II VIII, and IIQ VIII, and may be deemed to own beneficially the shares held by IWP VIII, II VIII, and IIQ VIII.

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Philip T. Gianos that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

Page 7 of 15 Pages

Cusip No. 03820J 10 0 13G Page 8 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) W. Stephen Holmes III (a Managing Director of InterWest Management Partners VIII, LLC) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (b) (a) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION **United States** 5 SOLE VOTING POWER NUMBER OF 0 6 SHARED VOTING POWER **SHARES BENEFICIALLY** 1,464,111 (1) **OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 0 SHARED DISPOSITIVE POWER WITH 1,464,111 (1) 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,464,111 (1) 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.1%

12 TYPE OF REPORTING PERSON

IN

(1) The shares are owned by IWP VIII, II VIII and IIQ VIII, and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants held by IWP VIII, (iii) 11,180 shares of Common Stock and (iv) 91 shares of Common Stock issuable pursuant to common stock purchase warrants held by II VIII, and (v) 40,080 shares of Common Stock and (vi) 328 shares of Common Stock issuable pursuant to common stock purchase warrants held by IIQ VIII. IMP VIII serves as the general partner of IWP VIII, II VIII and IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, II VIII, and IIQ VIII, and may be deemed to own beneficially the shares held by IWP VIII, II VIII, and IIQ VIII.

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by W. Stephen Holmes III that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

Page 8 of 15 Pages

Cusip No. 03820J 10 0 13G Page 9 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) Gilbert H. Kliman (a Managing Director of InterWest Management Partners VIII, LLC) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (b) (a) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION **United States** 5 SOLE VOTING POWER NUMBER OF 0 6 SHARED VOTING POWER **SHARES BENEFICIALLY** 1,464,111 (1) **OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 0 SHARED DISPOSITIVE POWER WITH 1,464,111 (1) 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,464,111 (1) 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.1%

12 TYPE OF REPORTING PERSON

IN

(1) The shares are owned by IWP VIII, II VIII and IIQ VIII, and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants held by IWP VIII, (iii) 11,180 shares of Common Stock and (iv) 91 shares of Common Stock issuable pursuant to common stock purchase warrants held by II VIII, and (v) 40,080 shares of Common Stock and (vi) 328 shares of Common Stock issuable pursuant to common stock purchase warrants held by IIQ VIII. IMP VIII serves as the general partner of IWP VIII, II VIII and IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, II VIII, and IIQ VIII, and may be deemed to own beneficially the shares held by IWP VIII, II VIII, and IIQ VIII.

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Gilbert H. Kliman that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

Page 9 of 15 Pages

Cusip No. 03820J 10 0 13G Page 10 of 15 Pages 1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO(S). OF ABOVE PERSON(S) (ENTITIES ONLY) Arnold L. Oronsky (a Managing Director of InterWest Management Partners VIII, LLC) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP 2 (a) (b) 3 SEC USE ONLY 4 CITIZENSHIP OR PLACE OF ORGANIZATION **United States** 5 SOLE VOTING POWER NUMBER OF 17.138 6 SHARED VOTING POWER **SHARES BENEFICIALLY** 1,464,111 (1) **OWNED BY** SOLE DISPOSITIVE POWER REPORTING **PERSON** 17.138 8 SHARED DISPOSITIVE POWER WITH 1,464,111 (1) 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,481,249 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES:

10

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.2%

12 TYPE OF REPORTING PERSON

IN

(1) The shares are owned by IWP VIII, II VIII and IIQ VIII, and include: (i) 1,400,956 shares of Common Stock and (ii) 11,476 shares of Common Stock issuable pursuant to common stock purchase warrants held by IWP VIII, (iii) 11,180 shares of Common Stock and (iv) 91 shares of Common Stock issuable pursuant to common stock purchase warrants held by II VIII, and (v) 40,080 shares of Common Stock and (vi) 328 shares of Common Stock issuable pursuant to common stock purchase warrants held by IIQ VIII. IMP VIII serves as the general partner of IWP VIII, II VIII and IIQ VIII. Cash, Gianos, Holmes, Kliman and Oronsky are Managing Directors of IMP VIII, and share voting and dispositive power over the shares held by IWP VIII, II VIII, and IIQ VIII, and may be deemed to own beneficially the shares held by IWP VIII, II VIII, and IIQ VIII.

Neither the filing of this statement on Schedule 13G nor any of its contents shall be deemed to constitute an admission by Arnold L. Oronsky that he is the beneficial owner of any of the Common Stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed, except to the extent of his pecuniary interest.

Page 10 of 15 Pages

ITEM 1.

(a) NAME OF ISSUER: Applied Genetic Technologies Corp.

(b) ADDRESS OF ISSUER S PRINCIPAL EXECUTIVE OFFICE:

11801 Research Drive, Suite D, Alachua, Florida 32615

ITEM 2.

(a) NAME OF PERSON(S) FILING:

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InterWest Partners VIII, LP ( IWP VIII )
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InterWest Investors VIII, LP (II VIII)

InterWest Investors Q VIII, LP (IIQ VIII)

InterWest Management Partners VIII, LLC (IMP VIII)

Harvey B. Cash (Cash)

Philip T. Gianos (Gianos)

W. Stephen Holmes III (Holmes)

Gilbert H. Kliman (Kliman)

Arnold L. Oronsky (Oronsky)

(b) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

2710 Sand Hill Road, Suite 200, Menlo Park, CA 94025

(c) CITIZENSHIP/PLACE OF ORGANIZATION:

IWP VIII: California
II VIII: California
IIQ VIII: California
IMP VIII: California
Cash: United States
Gianos: United States
Holmes: United States

Kliman: United States Oronsky: United States

Page 11 of 15 Pages

(d	I)	TITLE O	F CLASS	OF	SECURITIES:	Common Sto	ck
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(e) CUSIP NUMBER: 03820J 10 0 ITEM 3. NOT APPLICABLE.

ITEM 4. OWNERSHIP.

 $IWP\ VIII\ (1)\quad II\ VIII\ (1)\quad IIQ\ VIII\ (1)\quad IMP\ VIII\ (1)$