

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| | | | | | | | |
|--|---------|----------|--|--|---|--|--|
| 1. Name and Address of Reporting Person * | | | 2. Date of Event Requiring Statement (MM/DD/YYYY) | | 3. Issuer Name and Ticker or Trading Symbol | | |
| Stueland Katherine | | | 11/4/2016 | | Invitae Corp [NVTX] | | |
| (Last) | (First) | (Middle) | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | |
| C/O INVITAE CORPORATION, 458 BRANNAN STREET | | | <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) Chief Commercial Officer / | | | | |
| (Street) | | | 5. If Amendment, Date Original Filed (MM/DD/YYYY) | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | |
| SAN FRANCISCO, CA 94107 | | | | | <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person | | |
| (City) | (State) | (Zip) | | | | | |

Table I - Non-Derivative Securities Beneficially Owned

| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|
| Common Stock | 5000 (1) | D | |

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivate Security (Instr. 4) | 2. Date Exercisable and Expiration Date (MM/DD/YYYY) | | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) | | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|--|--|-------------------|---|----------------------------|--|---|---|
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | |
| Stock Option (right to buy) | (2) | 1/16/2024 | Common Stock | 7333 | \$3.4202 | D | |
| Stock Option (right to buy) | (3) | 2/28/2024 | Common Stock | 833 | \$3.4214 | D | |
| Stock Option (right to buy) | (4) | 10/15/2024 | Common Stock | 4666 | \$8.7012 | D | |
| Stock Option (right to buy) | (5) | 9/9/2025 | Common Stock | 30000 | \$10.94 | D | |
| Stock Option (right to buy) | (6) | 3/31/2026 | Common Stock | 40000 | \$10.23 | D | |

Explanation of Responses:

- (Shares issuable upon settlement of a restricted stock unit award that vests over three years, with 1/3rd of the total award vesting on each anniversary of the grant date, September 9, 2015.
- (The option vests over four years as follows: 25% of the shares vest on January 16, 2015, and 1/48th of the shares vest each month thereafter for the remaining three years.
- (The option vests over four years as follows: 25% of the shares vest on February 28, 2015, and 1/48th of the shares vest each month thereafter for the remaining three years.
- (The option vests over four years as follows: 25% of the shares vest on October 15, 2015, and 1/48th of the shares vest each month thereafter for the remaining three years.

4) three years.

(The option vests over four years as follows: 25% of the shares vest on September 9, 2016, and 1/48th of the shares vest each month thereafter for the remaining three years.

(The option vests over four years as follows: 25% of the shares vest on March 31, 2017, and 1/48th of the shares vest each month thereafter for the remaining three years.

Remarks:

Exhibit List: Exhibit 24 - Power of Attorney

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|---------------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Stueland Katherine C/O INVITAE CORPORATION 458 BRANNAN STREET SAN FRANCISCO, CA 94107 | | | Chief Commercial Officer | |

Signatures

/s/ Katherine Stueland

11/11/2016

**
Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

POWER OF ATTORNEY

For Executing Section 16 Forms, Form 144 and Schedule 13D or 13G

Know all by these presents that the undersigned hereby constitutes and appoints Lee Bendekgey, Tom Brida and Patty Dumond, or either of them signing individually, the undersigned's true and lawful attorney-in-fact to:

- (1) prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the Securities and Exchange Commission (the "SEC") a Form ID, including amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities and Exchange Act of 1934 or any rule or regulation of the SEC; and
- (2) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Invitae Corporation (the "Company") (a) Forms 3, 4 and 5 (including amendments thereto) in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder, (b) Form 144, and (c) Schedule 13D or Schedule 13G; and
- (3) do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to complete and execute any such Forms 3, 4 and 5, Form 144, and Schedule 13D or Schedule 13G (including amendments thereto) and timely file such Forms or schedules with the SEC and any stock exchange, self-regulatory association or any other authority; and
- (4) take any other action of any type whatsoever in connection with the foregoing that, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required of the undersigned, it being understood that the documents executed by the attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as the attorney-in-fact may approve in the attorney-in-fact's discretion.

The undersigned hereby grants to the attorney-in-fact full power and authority to do and perform all and every act and thing whatsoever requisite, necessary or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that the attorney -in-fact shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorney-in-fact, in serving in such capacity at the request of the undersigned, is not assuming any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

The undersigned agrees that such attorney-in-fact may rely entirely on information furnished orally or in writing by the undersigned to the attorney-in-fact. The undersigned also agrees to indemnify and hold harmless such attorney-in-fact against any losses, claims, damages or liabilities (or actions in these respects) that arise out of or are based upon any untrue statements or omissions of necessary facts in the information provided by the undersigned to such attorney-in fact for purposes of executing, acknowledging, delivering or filing Form 4 or Form 144 (including amendments thereto) and agrees to reimburse the attorney-in-fact on demand for any legal or other expenses reasonably incurred in connection with investigating or defending against any such loss, claim, damage, liability or action.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorney-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of the date written below.

Signature: /s/ Katherine Stueland

Printed Name:

Katherine Stueland

Date:

November 4, 2016