
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13D

(Rule 13d-101)

**Information To Be Included in Statements Filed Pursuant to
§ 240.13d-1(a) and Amendments Thereto Filed Pursuant to § 240.13d-2(a)**

**Under the Securities Exchange Act of 1934
(Amendment No. 4)***

GTx, INC.

(Name of Issuer)

Common Stock, \$0.001 par value
(Title of Class of Securities)

40052B108
(CUSIP Number)

Jack W. Schuler
c/o Crabtree Partners LLC
28161 North Keith Drive
Lake Forest, Illinois 60045
(847) 607-2066
(Name, Address and Telephone Number of Person
Authorized To Receive Notices and Communications)

August 19, 2013
(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), Rule 13d-1(f) or Rule 13d-1(g), check the following box.

* 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 disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "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).

| | | |
|--|--|---------------------------------------|
| 1 | Name of reporting person I.R.S. identification number (entity only) Jack W. Schuler | |
| 2 | Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds PF | |
| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/> | |
| 6 | Citizenship or place of organization United States | |
| Number of shares beneficially owned by each reporting person with: | 7 | Sole voting power 7,357,512 |
| | 8 | Shared voting power 6,266,954 |
| | 9 | Sole dispositive power 7,357,512 |
| | 10 | Shared dispositive power 6,266,954 |
| 11 | Aggregate amount beneficially owned by each reporting person 13,624,666 | |
| 12 | Check if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (11) 21.56%* | |
| 14 | Type of reporting person IN | |

* This calculation was made on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by the issuer on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

| | | |
|--|--|---------------------------------------|
| 1 | Name of reporting person I.R.S. identification number (entity only) Renate Schuler | |
| 2 | Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds N/A | |
| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/> | |
| 6 | Citizenship or place of organization United States | |
| Number of shares beneficially owned by each reporting person with: | 7 | Sole voting power 0 |
| | 8 | Shared voting power 6,266,954 |
| | 9 | Sole dispositive power 0 |
| | 10 | Shared dispositive power 6,266,954 |
| 11 | Aggregate amount beneficially owned by each reporting person 6,266,954 | |
| 12 | Check if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (11) 9.92%* | |
| 14 | Type of reporting person IN | |

* This calculation was made on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by the issuer on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

| | | |
|--|--|---------------------------------------|
| 1 | Name of reporting person I.R.S. identification number (entity only) Schuler Family Foundation EIN 36-4154510 | |
| 2 | Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds PF | |
| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/> | |
| 6 | Citizenship or place of organization United States | |
| Number of shares beneficially owned by each reporting person with: | 7 | Sole voting power 0 |
| | 8 | Shared voting power 6,266,954 |
| | 9 | Sole dispositive power 0 |
| | 10 | Shared dispositive power 6,266,954 |
| 11 | Aggregate amount beneficially owned by each reporting person 6,266,954 | |
| 12 | Check if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (11) 9.92%* | |
| 14 | Type of reporting person CO | |

* This calculation was made on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by the issuer on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

| | |
|--|--|
| 1 | Name of reporting person I.R.S. identification number (entity only) Tanya Eva Schuler Trust EIN 36-7205458 |
| 2 | Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> |
| 3 | SEC use only |
| 4 | Source of funds N/A |
| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/> |
| 6 | Citizenship or place of organization United States |
| Number of shares beneficially owned by each reporting person with: | 7 Sole voting power 638,475 |
| | 8 Shared voting power 0 |
| | 9 Sole dispositive power 638,475 |
| | 10 Shared dispositive power 0 |
| 11 | Aggregate amount beneficially owned by each reporting person 638,475 |
| 12 | Check if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> |
| 13 | Percent of class represented by amount in Row (11) 1.01%* |
| 14 | Type of reporting person OO |

* This calculation was made on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by the issuer on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

| | | |
|--|--|-----------------------------------|
| 1 | Name of reporting person I.R.S. identification number (entity only) Therese Heidi Schuler Trust EIN 36-7205459 | |
| 2 | Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds N/A | |
| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/> | |
| 6 | Citizenship or place of organization United States | |
| Number of shares beneficially owned by each reporting person with: | 7 | Sole voting power 655,238 |
| | 8 | Shared voting power 0 |
| | 9 | Sole dispositive power 655,238 |
| | 10 | Shared dispositive power 0 |
| 11 | Aggregate amount beneficially owned by each reporting person 655,238 | |
| 12 | Check if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (11) 1.04%* | |
| 14 | Type of reporting person OO | |

* This calculation was made on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by the issuer on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

| | | |
|--|--|-----------------------------------|
| 1 | Name of reporting person I.R.S. identification number (entity only) Tino Hans Schuler Trust EIN 36-7205456 | |
| 2 | Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> | |
| 3 | SEC use only | |
| 4 | Source of funds N/A | |
| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/> | |
| 6 | Citizenship or place of organization United States | |
| Number of shares beneficially owned by each reporting person with: | 7 | Sole voting power 646,029 |
| | 8 | Shared voting power 0 |
| | 9 | Sole dispositive power 646,029 |
| | 10 | Shared dispositive power 0 |
| 11 | Aggregate amount beneficially owned by each reporting person 646,029 | |
| 12 | Check if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/> | |
| 13 | Percent of class represented by amount in Row (11) 1.02%* | |
| 14 | Type of reporting person OO | |

* This calculation was made on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by the issuer on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

This Amendment No. 4 is filed to amend certain items of the Schedule 13D filed by the reporting persons on March 16, 2011, as amended by (i) Amendment No. 1 also filed on March 16, 2011, (ii) Amendment No. 2 filed on March 2, 2012 and (iii) Amendment No. 3 filed on June 15, 2012 (as amended by the three amendments, the "Schedule 13D").

This Amendment No. 4 reflects the purchase of 2,078,668 shares of GTx, Inc. common stock ("GTx common stock") subsequent to the filing of Amendment No. 3. These shares consist of 403,368 shares purchased by Jack W. Schuler on August 20, 21 and 22, 2013 (and reported on Forms 4 filed on August 22 and 26, 2013) and 1,675,300 shares purchased by the Schuler Family Foundation on August 19 and 20, 2013.

Items 5 and 6 of the Schedule 13D are amended to read as follows:

Item 5. Interest in Securities of the Issuer

The Schuler Family Foundation (the "Foundation") is a tax-exempt private operating foundation of which Mr. Schuler is one of three directors. The other two directors are Mr. Schuler's wife, Renate Schuler, and their daughter, Tanya Eva Schuler.

The Tanya Eva Schuler Trust, Therese Heidi Schuler Trust and Tino Hans Schuler Trust (the "Trusts") are irrevocable trusts that Mr. Schuler established for the benefit of his three children, all of whom are adults and none of whom reside with Mr. and Mrs. Schuler. Mr. Schuler is not a trustee of any of the Trusts.

Mr. Schuler disclaims any beneficial interest in (i) the shares of GTx common stock owned by the Foundation, (ii) the shares of GTx common stock owned by any of the Trusts or (iii) the shares of GTx common stock owned by Mrs. Schuler.

Mrs. Schuler disclaims any beneficial interest in (i) the shares of GTx common stock owned by the Foundation or (ii) the shares of GTx common stock owned by any of the Trusts.

The reporting persons may be deemed to constitute a "person" or "group" within the meaning of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended. The filing of this Schedule 13D is not, and should not be construed as, an admission that the reporting persons constitute a person or a group.

(a)

Jack W. Schuler

Jack W. Schuler may be deemed the beneficial owner of 13,624,466 shares of GTx common stock, consisting of: (i) 7,357,512 shares that he owns; and (ii) 6,266,954 shares that the Foundation owns. These shares represent 21.56% of the outstanding shares of GTx common stock, calculated on the basis of 63,185,389 shares outstanding as of July 17, 2013, as disclosed by GTx, Inc. on its quarterly report on Form 10-Q filed on July 22, 2013 for the quarter ending June 30, 2013.

Renate Schuler

Renate Schuler may be deemed the beneficial owner of 6,266,954 shares of GTx common stock, consisting of the 6,266,954 shares that the Foundation owns. These shares represent 9.92% of the outstanding shares of GTx common stock.

Schuler Family Foundation

The Foundation is the beneficial owner of 6,266,954 shares of GTx common stock. These shares represent 9.92% of the outstanding shares of GTx common stock.

Tanya Eva Schuler Trust

The Tanya Eva Schuler Trust is the beneficial owner of 638,475 shares of common stock. These shares represent 1.01% of the outstanding shares of GTx common stock.

Therese Heidi Schuler Trust

The Therese Heidi Schuler Trust is the beneficial owner of 655,238 shares of common stock. These shares represent 1.04% of the outstanding shares of GTx common stock.

Tino Hans Schuler Trust

The Tino Hans Schuler Trust is the beneficial owner of 646,029 shares of common stock. These shares represent 1.02% of the outstanding shares of GTx common stock.

(b)Jack W. Schuler

| | |
|---|------------|
| Shares with sole power to vote or to direct the vote | 7,357,512 |
| Shares with shared power to vote or direct the vote | 6,266,954* |
| Shares with sole power to dispose or direct the disposition | 7,357,512 |
| Shares with sole power to dispose or direct the disposition | 6,266,954* |

* Mr. Schuler shares the voting and dispositive power in respect of the 6,266,954 shares owned by the Schuler Family Foundation, of which Mr. Schuler is one of three directors. The other two directors are Mr. Schuler's wife, Renate Schuler, and their daughter, Tanya Eva Schuler.

Renate Schuler

| | |
|---|------------|
| Shares with sole power to vote or to direct the vote | 0 |
| Shares with shared power to vote or direct the vote | 6,266,954* |
| Shares with sole power to dispose or direct the disposition | 0 |
| Shares with sole power to dispose or direct the disposition | 6,266,954* |

* Mrs. Schuler shares the voting and dispositive power in respect of the 6,266,954 shares owned by the Schuler Family Foundation, of which Mrs. Schuler is one of three directors. The other two directors are Mrs. Schuler's husband, Jack W. Schuler, and their daughter, Tanya Eva Schuler.

Schuler Family Foundation

| | |
|---|-----------|
| Shares with sole power to vote or to direct the vote | 6,266,954 |
| Shares with shared power to vote or direct the vote | 0 |
| Shares with sole power to dispose or direct the disposition | 6,266,954 |
| Shares with sole power to dispose or direct the disposition | 0 |

Tanya Eva Schuler Trust

| | |
|---|---------|
| Shares with sole power to vote or to direct the vote | 638,475 |
| Shares with shared power to vote or direct the vote | 0 |
| Shares with sole power to dispose or direct the disposition | 638,475 |
| Shares with sole power to dispose or direct the disposition | 0 |

Therese Heidi Schuler Trust

| | |
|---|---------|
| Shares with sole power to vote or to direct the vote | 655,238 |
| Shares with shared power to vote or direct the vote | 0 |
| Shares with sole power to dispose or direct the disposition | 655,238 |
| Shares with sole power to dispose or direct the disposition | 0 |

Tino Hans Schuler Trust

| | |
|---|---------|
| Shares with sole power to vote or to direct the vote | 646,029 |
| Shares with shared power to vote or direct the vote | 0 |
| Shares with sole power to dispose or direct the disposition | 646,029 |
| Shares with sole power to dispose or direct the disposition | 0 |

(c)

On August 19, 2013 the Foundation bought 1,325,300 shares of GTx common stock on the open market at a weighted average purchase price of \$1.4751 per share, and on August 20, 2013 it bought 350,000 shares of GTx common stock on the open market at a weighted average purchase price of \$1.4501 per share.

On August 20, 2013 Jack W. Schuler bought 110,005 shares of GTx common stock on the open market at a weighted average purchase price of \$1.4501 per share; on August 21, 2013 he bought 199,586 shares of GTx common stock on the open market at a weighted average purchase price of \$1.3977 per share; and on August 22, 2013 he bought 93,777 shares of GTx common stock on the open market at a weighted average purchase price of \$1.3603 per share.

(d)

No other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the common shares that the reporting persons may be deemed to beneficially own.

(e)

Not applicable.

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

Pursuant to Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the reporting persons entered into an agreement on August 23, 2013 in respect of the joint filing of this Amendment No. 4 to Schedule 13D and any subsequent amendment. A copy of this joint filing agreement is filed as **Exhibit 1** and incorporated into this Item 6 by reference.

SIGNATURE

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.

Date: August 26, 2012.

/s/ JACK W. SCHULER

Jack W. Schuler

/s/ RENATE SCHULER

Renate Schuler

Schuler Family Foundation

By /s/ JACK W. SCHULER

Jack W. Schuler, Director

Tanya Eva Schuler Trust

By /s/ H. GEORGE SCHULER

H. George Schuler, Trustee

Therese Heidi Schuler Trust

By /s/ H. GEORGE SCHULER

H. George Schuler, Trustee

Tino Hans Schuler Trust

By /s/ H. GEORGE SCHULER

H. George Schuler, Trustee

Joint Filing Agreement

The undersigned hereby agree that Amendment No. 4 to Schedule 13D in respect of the common stock of GTX, Inc. is, and any subsequent amendment signed by each of the undersigned shall be, filed jointly on behalf of each of the undersigned pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended.

Dated: August 23, 2013.

/s/ JACK W. SCHULER

Jack W. Schuler

/s/ RENATE SCHULER

Renate Schuler

Schuler Family Foundation

By /s/ JACK W. SCHULER

Jack W. Schuler, Director

Tanya Eva Schuler Trust

By /s/ H. GEORGE SCHULER

H. George Schuler, Trustee

Therese Heidi Schuler Trust

By /s/ H. GEORGE SCHULER

H. George Schuler, Trustee

Tino Hans Schuler Trust

By /s/ H. GEORGE SCHULER

H. George Schuler, Trustee