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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

HUMACYTE, INC.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

44486Q 103 (CUSIP Number)

Laura E. Niklason Brady W. Dougan Ayabudge LLC c/o Humacyte, Inc. 2525 E NC Highway 54 Durham, North Carolina 27713 (919) 313-9633

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

August 26, 2021

(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 § 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box o.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7(b) for other parties to whom copies are to be sent.

*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 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).

SCHEDULE 13D

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NAME OF REPORTING PERSONS					
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	Laura E. Niklason				
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⁽¹⁾ Consists of (i) 1,148,240 shares of the Issuer's common stock held by Dr. Niklason, (ii) 827,177 shares of the Issuer's common stock subject to options exercisable within 60 days of August 26, 2021 held by Dr. Niklason, (iii) 810,161 shares of the Issuer's common stock held by Mr. Dougan, (iv) 30,197 shares of the Issuer's common stock subject to options exercisable within 60 days of August 26, 2021 held by Mr. Dougan, (v) 20,452,504 shares of the Issuer's common stock held by Ayabudge LLC. Dr. Niklason is married to Mr. Dougan and Mr. Dougan has sole voting and dispositive power over the shares held by Ayabudge LLC. By virtue of these relationships, Dr. Niklason may be deemed to share beneficial ownership of the securities held of record by Mr. Dougan and Ayabudge LLC.

⁽²⁾ Based upon 103,003,384 shares of the Issuer's Common Stock outstanding as of August 26, 2021, as reported in the Issuer's Current Report on Form 8-K (the "Form 8-K") filed with the Securities and Exchange Commission (the "SEC") on August 27, 2021.

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⁽¹⁾ Consists of (i) 810,161 shares of the Issuer's common stock held by Mr. Dougan, (ii) 30,197 shares of the Issuer's common stock subject to options exercisable within 60 days of August 26, 2021 held by Mr. Dougan, (iii) 1,148,240 shares of the Issuer's common stock held by Dr. Niklason, (iv) 827,177 shares of the Issuer's common stock subject to options exercisable within 60 days of August 26, 2021 held by Dr. Niklason and (v) 20,452,504 shares of the Issuer's common stock held by Ayabudge LLC. Mr. Dougan is married to Dr. Niklason and Mr. Dougan has sole voting and dispositive power over the shares held by Ayabudge LLC. By virtue of these relationships, Mr. Dougan may be deemed to share beneficial ownership of the securities held of record by Dr. Niklason and Ayabudge LLC.

⁽²⁾ Based upon 103,003,384 shares of the Issuer's Common Stock outstanding as of August 26, 2021, as reported in the Form 8-K filed with the SEC on August 27, 2021.

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⁽¹⁾ Consists of 20,452,504 shares of the Issuer's common stock held by Ayabudge LLC. Mr. Dougan is the sole member of Ayabudge LLC and has sole voting and dispositive power over the shares held by Ayabudge LLC. Ayabudge LLC has pledged 18,930,004 shares to certain lenders in connection with a financing arrangement.

⁽²⁾ Based upon 103,003,384 shares of the Issuer's Common Stock outstanding as of August 26, 2021, as reported in the Form 8-K filed with the SEC on August 27, 2021.

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Item 1. Security and Issuer

This Schedule 13D (the "<u>Statement</u>") relates to the common stock, par value \$0.0001 per share (the "<u>Common Stock</u>"), of Humacyte, Inc., a Delaware corporation (the "<u>Issuer</u>"). The Issuer's principal executive offices are located at 2525 E NC Highway 54, Durham, North Carolina 27713.

Item 2. Identity and Background

- (a), (b), (c) and (f) This Statement is being filed on behalf of the following persons (each, a "Reporting Person" and collectively, the "Reporting Persons"):
 - (i) Laura E. Niklason, a United States citizen;
 - (ii) Brady W. Dougan, a United States citizen; and
 - (iii) Ayabudge LLC, a Delaware limited liability company (Ayabudge").

The agreement among the Reporting Persons relating to this joint filing of this Schedule 13D is attached to this Schedule 13D as Exhibit 1.

The principal business of Dr. Niklason is serving as President, Chief Executive Officer and a member of the board of directors of the Issuer.

The principal business of Mr. Dougan is serving as Chairman and Chief Executive Officer of Exos TFP Holdings LLC, a next generation technology driven institutional finance platform, and a member of the board of directors of the Issuer.

The principal business of Ayabudge is serving as an investment vehicle. Mr. Dougan is the sole member of Ayabudge and has sole voting and dispositive power over the shares held by Ayabudge.

The principal business address of each of the Reporting Persons is 2525 E NC Highway 54, Durham, North Carolina 27713.

(d) – (e) During the last five years, none of the Reporting Persons have been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

The shares of Common Stock reported herein as beneficially owned by the Reporting Persons were acquired in connection with the Business Combination as described below. On August 26, 2021 (the "Closing Date"), Alpha Healthcare Acquisition Corp., a Delaware corporation and the Issuer's predecessor company ("AHAC"), consummated the previously announced business combination (the "Business Combination") pursuant to the terms of the Business Combination Agreement, dated as of February 17, 2021 (the "Business Combination Agreement"), by and among AHAC, Hunter Merger Sub, Inc., a Delaware corporation ("Hunter Merger Sub") and Humacyte, Inc., a Delaware corporation ("Legacy Humacyte"). Pursuant to the Business Combination Agreement, on the Closing Date, (i) AHAC changed its name to "Humacyte, Inc.", and (ii) Hunter Merger Sub merged with and into Legacy Humacyte, with Legacy Humacyte as the surviving company in the Business Combination. After giving effect to such Business Combination, Legacy Humacyte became a wholly owned subsidiary of New Humacyte and changed its name to "Humacyte Global, Inc."

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Pursuant to the Business Combination Agreement, at the effective time of the Business Combination (the "<u>Effective Time</u>"), (i) each outstanding share of common stock of Legacy Humacyte (the "<u>Legacy Humacyte common stock</u>") was converted into the right to receive 0.26260 shares of the Issuer's Common Stock; (ii) each outstanding share of preferred stock of Legacy Humacyte was converted into the right to receive the aggregate number of shares of Common Stock that would be issued upon conversion of the underlying Legacy Humacyte common stock, multiplied by 0.26260; and (iii) each outstanding option and warrant to purchase Legacy Humacyte common stock was converted into an option or warrant, as applicable, to purchase a number of shares of Common Stock equal to the number of shares of Legacy Humacyte common stock subject to such option or warrant multiplied by 0.26260.

Immediately prior to the Effective Time, 4,372,639 shares of Legacy Humacyte common stock and options to purchase 3,150,000 shares of Legacy Humacyte common stock held by Dr. Niklason were automatically converted into 1,148,240 shares of Common Stock and options to purchase 827,177 shares of Common Stock, respectively.

Immediately prior to the Effective Time, options to purchase 115,000 shares of Legacy Humacyte common stock held by Mr. Dougan were automatically converted into options to purchase 30,197 shares of Common Stock.

Mr. Dougan holds 810,161 shares of Common Stock. In connection with the Business Combination, during the period from June 7, 2021 to August 25, 2021, Mr. Dougan purchased 860,000 shares of Common Stock and sold 49,839 shares of Common Stock on the open market at prices ranging from \$9.84 to \$11.04 per share. During the same period, Mr. Dougan purchased and sold 30,000 warrants to purchase Common Stock on the open market at prices ranging from \$2.00 to \$2.50 per warrant. The total net consideration for these shares of Common Stock and warrants was \$8,386,925.19, and such consideration was obtained from Mr. Dougan's personal funds.

Immediately prior to the Effective Time, 72,087,724 shares of Legacy Humacyte common stock held by Ayabudge were automatically converted into 18,930,004 share of Common Stock.

In connection with the Business Combination, AHAC entered into a Subscription Agreement (the "<u>Subscription Agreement</u>") with Ayabudge pursuant to which, among other things, Ayabudge subscribed to purchase an aggregate of 1,522,500 shares of the Common Stock for a purchase price of \$10.00 per share, which shares were issued immediately prior to the Effective Time (the "<u>PIPE Investment</u>"). The total consideration paid by Ayabudge for these shares of Common Stock was \$15,225,000, and such consideration was obtained from certain lenders in connection with a financing arrangement.

Item 4. Purpose of Transaction

The information contained above in Item 1 and Item 3 of this Schedule 13D is incorporated herein by reference. The Reporting Persons acquired the securities of the Issuer in connection with the Business Combination.

Dr. Niklason serves as the President, Chief Executive Officer and a member of the board of directors of the Issuer and, in such capacity, may have influence over the corporate activities of the Issuer, including activities which may relate to items described in subparagraphs (a) through (j) of Item 4 of Schedule 13D. Subject to the Investor Rights and Lock-Up Agreement described in Item 6 of this Schedule 13D and the Issuer's Insider Trading Policy, Dr. Niklason may from time to time buy or sell securities of the Issuer as appropriate for her personal circumstances.

Mr. Dougan serves as a member of the board of directors of the Issuer and, in such capacity, may have influence over the corporate activities of the Issuer, including activities which may relate to items described in subparagraphs (a) through (j) of Item 4 of Schedule 13D. Subject to the Investor Rights and Lock-Up Agreement described in Item 6 of this Schedule 13D and the Issuer's Insider Trading Policy, Mr. Dougan may from time to time buy or sell securities of the Issuer as appropriate for his personal circumstances.

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Except as described in this Schedule 13D, the Reporting Persons do not have any present plans or proposals that relate to or would result in any of the actions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D, although, subject to the agreements described herein, the Reporting Persons, at any time and from time to time, may review, reconsider and change their position and/or change their purpose and/or develop such plans and may seek to influence management of the Issuer or the board of directors of the Issuer with respect to the business and affairs of the Issuer and may from time to time consider pursuing or proposing such matters with advisors, the Issuer or other persons.

Item 5. Interest in Securities of the Issuer

(a)-(b)

Number of shares of Common Stock beneficially owned:

Laura E. Niklason	23,268,279 shares
Brady W. Dougan	23,268,279 shares
Ayabudge LLC	20,452,504 shares

Percent of class:

Laura E. Niklason	22.4%
Brady W. Dougan	22.4%
Ayabudge LLC	19.9%

The percentage ownership was calculated based upon 103,003,384 shares of the Issuer's Common Stock outstanding as of August 26, 2021, as reported in the Form 8-K filed with the SEC on August 27, 2021.

Number of shares as to which such person has:

(i) Sole power to vote or to direct the vote:

Laura E. Niklason	0 shares
Brady W. Dougan	0 shares
Ayabudge LLC	0 shares

(ii) Shared power to vote or to direct the vote:

Laura E. Niklason	23,268,279 shares
Brady W. Dougan	23,268,279 shares
Avabudge LLC	20.452.504 shares

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(iii) Sole power to dispose or to direct the disposition of:

Laura E. Niklason	0 shares
Brady W. Dougan	0 shares
Ayabudge LLC	0 shares

(iv) Shared power to dispose or to direct the disposition of:

Laura E. Niklason	23,268,279 shares
Brady W. Dougan	23,268,279 shares
Ayabudge LLC	20,452,504 shares

- (c) Except as reported in this Schedule 13D, none of the Reporting Persons has effected any transactions in the Common Stock during the past sixty (60) days.
 - (d) Not applicable.
 - (e) Not applicable.

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

The information contained above in Item 3 of this Schedule 13D is incorporated herein by reference.

Dr. Niklason will be entitled to receive compensation and other benefits as an employee of the Issuer. In such capacity, she may also be granted equity awards with respect to the Common Stock from time to time.

Mr. Dougan will be entitled to receive compensation as a director of the Issuer. In such capacity, he may also be granted equity awards with respect to the Common Stock from time to time.

Ayabudge LLC has pledged 18,930,004 shares to Nineteen77 Capital Solutions A LP and Bermudez Mutuari Ltd. in connection with a financing arrangement.

Investor Rights and Lock-Up Agreement

At the Effective Time, AHAC and certain of the Legacy Humacyte stockholders and AHAC stockholders entered into an Investor Rights and Lock-up Agreement (the "Investor Rights and Lock-up Agreement"), pursuant to which, among other things, such stockholders (i) agreed not to effect any sale or distribution of any shares held by any of them during the one-year lock-up period, subject to certain exceptions described below, and (ii) were granted certain registration rights with respect to certain securities held by them.

If the volume weighted average price of the Common Stock on The Nasdaq Capital Market ("Nasdaq"), or any other national securities exchange on which the Common Stock is then traded, is greater than or equal to \$15.00 over any 20 trading days within any 30 trading day period following the Closing Date, then, commencing at least 180 days after the Closing Date, the lock-up period shall be deemed to have expired with respect to 50% of the shares of the Common Stock held by each party subject to the Investor Rights and Lock-up Agreement. The lock-up period does not apply to any shares purchased in the PIPE Investment by parties to the Investor Rights and Lock-up Agreement.

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Each of Dr. Niklason, Mr. Dougan and Ayabudge is a party to the Investor Rights and Lock-Up Agreement.

Except as disclosed in this Schedule 13D, there are no contracts, arrangements, understandings or relationships (legal or otherwise) between the Reporting Persons with respect to the securities of the Issuer.

Item 7. Materials to Be Filed as Exhibits

Exhibit 1	Joint Filing Agreement among Laura E. Niklason, Brady W. Dougan and Ayabudge LLC
Exhibit 2	Form of Subscription Agreement (incorporated by reference to Exhibit 10.3 of the Issuer's Registration Statement on S-4/A filed with the SEC on August 2, 2021).
Exhibit 3	Form of Investor Rights and Lock-Up Agreement (incorporated by reference to Exhibit 10.2 of the Issuer's Registration Statement on S-4/A filed with the SEC on August 2, 2021).

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SIGNATURE

After reasonable inquiry and to the best of each of the undersigned's knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: August 27, 2021 Laura E. Niklason

By: /s/ Laura E. Niklason by Dale A. Sander as Attorney-in-Fact

Date: August 27, 2021 Brady W. Dougan

By: /s/ Brady W. Dougan by Dale A. Sander as Attorney-in-Fact

Date: August 27, 2021 Ayabudge LLC

By: /s/ Brady W. Dougan by Dale A. Sander as Attorney-in-Fact

Name: Brady W. Dougan
Title: Sole Member

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EXHIBIT 1

JOINT FILING AGREEMENT

The undersigned acknowledge and agree that the foregoing statement on Schedule 13D is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13D shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him, her or it contained herein, but shall not be responsible for the completeness and accuracy of the information concerning the other entities or persons, except to the extent that he, she or it knows or has reason to believe that such information is inaccurate.

Date: August 27, 2021 Laura E. Niklason

By: /s/ Laura E. Niklason by Dale A. Sander as Attorney-in-Fact

Date: August 27, 2021 Brady W. Dougan

By: /s/ Brady W. Dougan by Dale A. Sander as Attorney-in-Fact

Date: August 27, 2021 Ayabudge LLC

By: /s/ Brady W. Dougan by Dale A. Sander as Attorney-in-Fact

Name: Brady W. Dougan
Title: Sole Member