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

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**SCHEDULE 13G**

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

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**Aura Biosciences, Inc.**  
(Name of Issuer)

**Common Stock, \$0.00001 par value per share**  
(Title of Class of Securities)

**05153U107**  
(CUSIP Number)

**December 31, 2021**  
(Date of Event Which Requires Filing of this Statement)

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Check the appropriate box to designate the 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).

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1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Lundbeckfond Invest A/S (“Lundbeckfond”)	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION  Denmark	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER  2,017,652 (1)
	6	SHARED VOTING POWER  0
	7	SOLE DISPOSITIVE POWER  2,017,652 (1)
	8	SHARED DISPOSITIVE POWER  0
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  2,017,652 (1)	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)  <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  6.9% (2)	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)  FI	

- (1) All of such shares are Common Stock and held of record by Lundbeckfond. Skole (as defined in Item 2(a) below) is the Chief Executive Officer of Lundbeckfond and may be deemed to have sole power to vote and dispose of these shares. The directors of Lundbeckfond have delegated voting and dispositive power with respect to the shares held by Lundbeckfond to Skole.
- (2) Based on 29,210,549 shares of Common Stock outstanding as of November 19, 2021, as reported by the Issuer in its quarterly report on Form 10Q, filed with the United States Securities and Exchange Commission on November 24, 2021 (“Form 10-Q”).

1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  Lene Skole ("Skole")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION  Denmark	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER  2,017,652 (1)
	6	SHARED VOTING POWER  0
	7	SOLE DISPOSITIVE POWER  2,017,652 (1)
	8	SHARED DISPOSITIVE POWER  0
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  2,017,652 (1)	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)  <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  6.9% (2)	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)  IN	

- (1) All of such shares are Common Stock and held of record by Lundbeckfond. Skole is the Chief Executive Officer of Lundbeckfond and may be deemed to have sole power to vote and dispose of these shares. The directors of Lundbeckfond have delegated voting and dispositive power with respect to the shares held by Lundbeckfond to Skole.
- (2) Based on 29,210,549 shares of Common Stock outstanding as of November 19, 2021, as reported by the Issuer in its Form 10Q.

## Schedule 13G

Item 1(a). Name of Issuer:

Aura Biosciences, Inc. (the "Issuer").

Item 1(b). Address of Issuer's Principal Executive Offices:

85 Bolton Street

Cambridge, MA 02140

Item 2(a). Name of Persons Filing:

This joint statement on Schedule 13G is being filed by Lundbeckfond Invest A/S ("Lundbeckfond") and Lene Skole ("Skole"). Lundbeckfond and Skole collectively are referred to as the "Reporting Persons."

Item 2(b). Address or Principal Business Office or, if None, Residence:

The principal business office of each Reporting Person is: c/o Lundbeckfond Invest A/S, Scherfigsvej 7, DK-2100, Copenhagen, Denmark.

Item 2(c). Citizenship:

Lundbeckfond is a private Danish corporation.

Skole is a citizen of Denmark.

Item 2(d). Title of Class of Securities:

Common Stock, \$0.00001 par value per share ("Common Stock").

Item 2(e). CUSIP Number:

05153U107

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

Not applicable.

Item 4. Ownership.

## (a) Amount beneficially owned:

See line 9 of cover sheets.

## (b) Percent of class:

See Line 11 of cover sheets. The percentages set forth on the cover sheet for each Reporting Person are calculated based on 29,210,549 shares of Common Stock outstanding as of November 19, 2021, as reported by the Issuer in its Form 10Q.

## (c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote: see line 5 of cover sheets.\*

(ii) Shared power to vote or to direct the vote: see line 6 of cover sheets.\*

(iii) Sole power to dispose or to direct the disposition of: see line 7 of cover sheets.\*

(iv) Shared power to dispose or to direct the disposition of: see line 8 of cover sheets.\*

\* Each Reporting Person disclaims beneficial ownership of such shares of Common Stock, except for the shares, if any, such Reporting Person holds of record and/or to the extent of its pecuniary interest therein.

Item 5. Ownership of Five Percent or Less of a Class.

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Under certain circumstances set forth in the governing documents of Lundbeckfond, the stockholders of Lundbeckfond may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the Issuer.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

Not applicable.

Material to be Filed as Exhibits.

Exhibit 1 – Agreement Regarding Joint Filing of Schedule 13G.

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.

Date: January 26, 2022

LUNDBECKFOND INVEST A/S

By: /s/ Lene Skole

Name: Lene Skole

Title: Chief Executive Officer & Attorney-in-Fact\*

By: /s/ Mette Kirstine Agger

Name: Mette Kirstine Agger

Title: Attorney-in-Fact\*

LENE SKOLE

/s/ Lene Skole

\* This Schedule 13G was executed by Lene Skole and Mette Kristine Agger on behalf of the entity listed above, as indicated, pursuant to that certain Power of Attorney, a copy of which is already on file with the appropriate agencies.

**JOINT FILING AGREEMENT**

The undersigned hereby agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned, and any amendments thereto executed by the undersigned shall be filed on behalf of each of the undersigned without the necessity of filing any additional joint filing agreement. The undersigned acknowledge that each is responsible for the timely filing of such statement on Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning him, her or it contained therein, but shall not be responsible for the completeness or accuracy of the information concerning the others of the undersigned, except to the extent that he, she or it knows or has reason to believe that such information is inaccurate or incomplete. This Joint Filing Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

Date: January 26, 2022

LUNDBECKFOND INVEST A/S

By: /s/ Lene Skole

Name: Lene Skole

Title: Chief Executive Officer & Attorney-in-Fact\*

By: /s/ Mette Kirstine Agger

Name: Mette Kirstine Agger

Title: Attorney-in-Fact\*

LENE SKOLE

/s/ Lene Skole

This Schedule 13G was executed by Lene Skole and Mette Kristine Agger on behalf of the entity listed above, as indicated, pursuant to that certain Power of Attorney, a copy of which is already on file with the appropriate agencies.