

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500.	OMB Nos. 1210-0110 1210-0089 2022 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2022 or fiscal plan year beginning <u>01/01/2022</u> and ending <u>12/31/2022</u>	
A This return/report is for:	☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.) ☒ a single-employer plan ☐ a DFE (specify) ____
B This return/report is:	☐ the first return/report ☐ the final return/report ☒ an amended return/report ☐ a short plan year return/report (less than 12 months)
C If the plan is a collectively-bargained plan, check here.	☐
D Check box if filing under:	☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)
E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here.	☐

Part II	Basic Plan Information —enter all requested information		
1a Name of plan	<u>AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE DEFINED CONTRIBUTION RETIREMENT PLAN</u>		
	1b Three-digit plan number (PN) ▶	<u>001</u>	
	1c Effective date of plan	<u>01/01/1957</u>	
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) <u>AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE</u> <u>AAAS</u> <u>1200 NEW YORK AVENUE N.W.</u> <u>WASHINGTON, DC 20005</u>	2b Employer Identification Number (EIN) <u>53-0196568</u>	2c Plan Sponsor's telephone number <u>202-326-6476</u>	2d Business code (see instructions) <u>813000</u>

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	12/19/2023	STEPHEN ISSING
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	12/19/2023	STEPHEN ISSING
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2022)
v. 220413

3a Plan administrator's name and address ☒ Same as Plan Sponsor		3b Administrator's EIN
		3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name		4b EIN 4d PN
5 Total number of participants at the beginning of the plan year		5 1310
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d).		
a(1) Total number of active participants at the beginning of the plan year		6a(1) 394
a(2) Total number of active participants at the end of the plan year		6a(2) 449
b Retired or separated participants receiving benefits		6b 0
c Other retired or separated participants entitled to future benefits.....		6c 888
d Subtotal. Add lines 6a(2) , 6b , and 6c		6d 1337
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.		6e 25
f Total. Add lines 6d and 6e		6f 1362
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item).....		6g 1336
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....		6h 25
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)		7
8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions: 2F 2G 2L 2M 2S 2T		
b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:		
9a Plan funding arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor		9b Plan benefit arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)		
a Pension Schedules (1) ☒ R (Retirement Plan Information) (2) ☐ MB (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary (3) ☐ SB (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary		b General Schedules (1) ☒ H (Financial Information) (2) ☐ I (Financial Information – Small Plan) (3) ☒ 1 A (Insurance Information) (4) ☒ C (Service Provider Information) (5) ☒ D (DFE/Participating Plan Information) (6) ☐ G (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2022 Form M-1 annual report. If the plan was not required to file the 2022 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

SCHEDULE A (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Insurance Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500. ▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE DEFINED CONTRIBUTION RETIREMENT PLAN	B Three-digit plan number (PN) ▶ 001	
C Plan sponsor's name as shown on line 2a of Form 5500 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE	D Employer Identification Number (EIN) 53-0196568	

Part I	Information Concerning Insurance Contract Coverage, Fees, and Commissions	Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A.
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1 Coverage Information:

(a) Name of insurance carrier TIAA-CREF

(b) EIN	(c) NAIC code	(d) Contract or identification number	(e) Approximate number of persons covered at end of policy or contract year	Policy or contract year	
				(f) From	(g) To
13-1624203	69345	151028	836	01/01/2022	12/31/2022

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid.	
(a) Total amount of commissions paid	(b) Total amount of fees paid

3 Persons receiving commissions and fees. (Complete as many entries as needed to report all persons).	
(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid	

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	
(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid			

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

Part II Investment and Annuity Contract Information

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

4	Current value of plan's interest under this contract in the general account at year end.....	4	45366341
5	Current value of plan's interest under this contract in separate accounts at year end.....	5	98066800

6 Contracts With Allocated Funds:**a** State the basis of premium rates ▶

b	Premiums paid to carrier	6b	
c	Premiums due but unpaid at the end of the year	6c	
d	If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount..... Specify nature of costs ▶	6d	

e Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity
(3) ☐ other (specify) ▶

f If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ☐**7 Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)**

a Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee
(3) ☒ guaranteed investment (4) ☐ other ▶

b	Balance at the end of the previous year	7b	44125921
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c	Additions: (1) Contributions deposited during the year	7c(1)	378061	
	(2) Dividends and credits	7c(2)		
	(3) Interest credited during the year	7c(3)	1798032	
	(4) Transferred from separate account	7c(4)	5923653	
	(5) Other (specify below)	7c(5)	61738	
	▶ MISCELLANEOUS CREDITS, INCLUDING INVESTMENT GAINS AND TRANSFERS FROM FULLY ALLOCATED CONTRACTS			

(6) Total additions	7c(6)	8161484
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d	Total of balance and additions (add lines 7b and 7c(6))	7d	52287405
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e Deductions:

(1) Disbursed from fund to pay benefits or purchase annuities during year	7e(1)	2031458	
	7e(2)	58487	
	7e(3)	4831119	
	7e(4)		

(5) Total deductions	7e(5)	6921064
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f	Balance at the end of the current year (subtract line 7e(5) from line 7d)	7f	45366341
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Part III Welfare Benefit Contract Information

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

8 Benefit and contract type (check all applicable boxes)

- a** ☐ Health (other than dental or vision)
 b ☐ Dental
 c ☐ Vision
 d ☐ Life insurance
e ☐ Temporary disability (accident and sickness)
 f ☐ Long-term disability
 g ☐ Supplemental unemployment
 h ☐ Prescription drug
i ☐ Stop loss (large deductible)
 j ☐ HMO contract
 k ☐ PPO contract
 l ☐ Indemnity contract
m ☐ Other (specify) ▶

9 Experience-rated contracts:

a Premiums: (1) Amount received	9a(1)		
(2) Increase (decrease) in amount due but unpaid	9a(2)		
(3) Increase (decrease) in unearned premium reserve.....	9a(3)		
(4) Earned ((1) + (2) - (3)).....		9a(4)	
b Benefit charges (1) Claims paid.....	9b(1)		
(2) Increase (decrease) in claim reserves	9b(2)		
(3) Incurred claims (add (1) and (2)).....		9b(3)	
(4) Claims charged		9b(4)	
c Remainder of premium: (1) Retention charges (on an accrual basis) --			
(A) Commissions	9c(1)(A)		
(B) Administrative service or other fees	9c(1)(B)		
(C) Other specific acquisition costs.....	9c(1)(C)		
(D) Other expenses	9c(1)(D)		
(E) Taxes	9c(1)(E)		
(F) Charges for risks or other contingencies	9c(1)(F)		
(G) Other retention charges.....	9c(1)(G)		
(H) Total retention.....		9c(1)(H)	
(2) Dividends or retroactive rate refunds. (These amounts were ☐ paid in cash, or ☐ credited.)		9c(2)	
d Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement.....		9d(1)	
(2) Claim reserves		9d(2)	
(3) Other reserves		9d(3)	
e Dividends or retroactive rate refunds due. (Do not include amount entered in line 9c(2).).....		9e	

10 Nonexperience-rated contracts:

a Total premiums or subscription charges paid to carrier	10a	
b If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount.	10b	

Specify nature of costs.

Part IV Provision of Information

11 Did the insurance company fail to provide any information necessary to complete Schedule A? ☐ Yes ☒ No

12 If the answer to line 11 is "Yes," specify the information not provided. ▶

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2022
		This Form is Open to Public Inspection.

For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE DEFINED CONTRIBUTION RETIREMENT PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE	D Employer Identification Number (EIN) 53-0196568	

Part I	Service Provider Information (see instructions)
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You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. ☒ Yes ☐ No
- b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
TIAA
13-1624203
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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

EXPERIENTIAL WEALTH, INC

52-1804602

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 50	NONE	58479	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

TIAA

13-1624203

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
15 17 27 28 38 50 52 54 64 66	NONE	1076	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☐ No ☒

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE D (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	DFE/Participating Plan Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection.
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE DEFINED CONTRIBUTION RETIREMENT PLAN	B Three-digit plan number (PN) ▶	001
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE	D Employer Identification Number (EIN) 53-0196568	

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
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a Name of MTIA, CCT, PSA, or 103-12 IE: TIAA REAL ESTATE		
b Name of sponsor of entity listed in (a): TIAA-CREF		
c EIN-PN 13-1624203-004	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 10636094
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
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103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)

Part II **Information on Participating Plans (to be completed by DFEs)**

(Complete as many entries as needed to report all participating plans)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
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plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
For calendar plan year 2022 or fiscal plan year beginning <u>01/01/2022</u> and ending <u>12/31/2022</u>		
A Name of plan <u>AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE DEFINED CONTRIBUTION RETIREMENT PLAN</u>	B Three-digit plan number (PN) ► 	
C Plan sponsor's name as shown on line 2a of Form 5500 <u>AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE</u>	D Employer Identification Number (EIN) <u>53-0196568</u>	

Part I	Asset and Liability Statement		
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.			
Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash.....		1a	
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions.....		1b(1)	156950178543
(2) Participant contributions.....		1b(2)	105826126091
(3) Other.....		1b(3)	
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit).....		1c(1)	
(2) U.S. Government securities		1c(2)	
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred		1c(3)(A)	
(B) All other		1c(3)(B)	
(4) Corporate stocks (other than employer securities):			
(A) Preferred		1c(4)(A)	
(B) Common.....		1c(4)(B)	
(5) Partnership/joint venture interests		1c(5)	
(6) Real estate (other than employer real property)		1c(6)	
(7) Loans (other than to participants).....		1c(7)	
(8) Participant loans.....		1c(8)	88214121213
(9) Value of interest in common/collective trusts.....		1c(9)	
(10) Value of interest in pooled separate accounts		1c(10)	970308810636094
(11) Value of interest in master trust investment accounts.....		1c(11)	
(12) Value of interest in 103-12 investment entities		1c(12)	
(13) Value of interest in registered investment companies (e.g., mutual funds).....		1c(13)	175139801141792797
(14) Value of funds held in insurance company general account (unallocated contracts).....		1c(14)	4412592145366341
(15) Other		1c(15)	010587

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	229319800	198231666

Liabilities

g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through 1j)	1k	0	0

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	229319800	198231666
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Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income

		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	4641935	
(B) Participants	2a(1)(B)	3266156	
(C) Others (including rollovers)	2a(1)(C)	345892	
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		8253983
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)	4617	
(F) Other	2b(1)(F)	1798032	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		1802649
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	1610685	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		1610685
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		0
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		802214
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		-34042645
c Other income	2c		59103
d Total income. Add all income amounts in column (b) and enter total	2d		-21514011
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	9274778	
(2) To insurance carriers for the provision of benefits	2e(2)	239790	
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		9514568
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)		
(3) Investment advisory and management fees	2i(3)	58479	
(4) Other	2i(4)	1076	
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		59555
j Total expenses. Add all expense amounts in column (b) and enter total	2j		9574123
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d	2k		-31088134
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☐ Unmodified (2) ☐ Qualified (3) ☒ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☐ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: BDO USA, P.C.

(2) EIN: 13-5381590

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)

	Yes	No	Amount
4a	X		568

	Yes	No	Amount
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)			
4b		X	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)			
4c		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)			
4d		X	
e Was this plan covered by a fidelity bond?	X		10000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
4f		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?		X	
4g		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?		X	
4h		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	X		
4i	X		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)		X	
4j		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?		X	
4k		X	
l Has the plan failed to provide any benefit when due under the plan?		X	
4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)		X	
4m		X	
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			
4n			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☐ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____.

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection.
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE DEFINED CONTRIBUTION RETIREMENT PLAN		B Three-digit plan number (PN) ► 001
C Plan sponsor's name as shown on line 2a of Form 5500 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE		D Employer Identification Number (EIN) 53-0196568
Part I Distributions		
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....		1 0
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 82-2826183		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year.....		3
Part II Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)		
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ☐ Yes ☐ No ☐ N/A If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived).....		6a
b Enter the amount contributed by the employer to the plan for this plan year.....		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount).....		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ☐ Yes ☐ No ☐ N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ☐ Yes ☐ No ☐ N/A		
Part III Amendments		
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box..... ☐ Increase ☐ Decrease ☐ Both ☐ No		
Part IV ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.		
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?.....		☐ Yes ☐ No
11 a Does the ESOP hold any preferred stock?.....		☐ Yes ☐ No
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.).....		☐ Yes ☐ No
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?.....		☐ Yes ☐ No
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2022 v. 220413		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14	Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:		
	a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment).....	14a	
	b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b	
	c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c	
15	Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:		
	a The corresponding number for the plan year immediately preceding the current plan year.....	15a	
	b The corresponding number for the second preceding plan year.....	15b	
16	Information with respect to any employers who withdrew from the plan during the preceding plan year:		
	a Enter the number of employers who withdrew during the preceding plan year	16a	
	b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers.....	16b	
17	If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐		

Part VI	Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans
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18	If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐
19	If the total number of participants is 1,000 or more, complete lines (a) through (c) a Enter the percentage of plan assets held as: Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____% b Provide the average duration of the combined investment-grade and high-yield debt: ☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more c What duration measure was used to calculate line 19(b)? ☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): _____
20	PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20. a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box: ☐ Yes. ☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date. ☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date. ☐ No. Other. Provide explanation _____

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Financial Statements and ERISA-Required Supplemental Schedules
As of December 31, 2022 and 2021
and for the Year Ended December 31, 2022**

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Report and Financial Statements**

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Note: Other schedules required by Section 2520.103.10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA have been omitted because they are not applicable



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8401 Greensboro Drive
Suite 800
McLean, VA 22102

Independent Auditor's Report

To the Plan Administrator
American Association for the Advancement of Science
Defined Contribution Retirement Plan
Washington, D.C.

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We were engaged to perform audits of the financial statements of **American Association for the Advancement of Science Defined Contribution Retirement Plan (the Plan)**, an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 (ERISA), as permitted by ERISA Section 103(a)(3)(C). The financial statements comprise the statements of net assets available for benefits as of December 31, 2022 and 2021, and the related statement of changes in net assets available for benefits for the year ended December 31, 2022, and the related notes to the financial statements.

Management, having determined it is permissible in the circumstances, has elected to have the audits of the Plan's financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's (DOL) Rules and Regulations for Reporting and Disclosure under ERISA (ERISA Section 103(a)(3)(C) audit). As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the Plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency (qualified institution), provided that the investment information is prepared and certified to by the qualified institution in accordance with 29 CFR 2520.103-5 of the DOL's Rules and Regulations for Reporting and Disclosure under ERISA.

Management has obtained a certification from the qualified institutions as of December 31, 2022 and 2021, and for the year ended December 31, 2022, stating that the certified investment information, as described in Note 3 to the financial statements, is complete and accurate.

Disclaimer of Opinion

We do not express an opinion on the accompanying financial statements of the Plan. Because of the significance of the matter described in the *Basis for Disclaimer of Opinion* section of our report, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on the financial statements.

Basis for Disclaimer

Prior to January 1, 2009, records were maintained at a contract, not a plan level; therefore, management has not maintained, and TIAA and CREF did not provide, sufficient accounting records and supporting documentation relating to certain annuity contracts and custodial accounts issued to current and former employees, and supporting documentation is not adequate to assure the completeness and accuracy of the amounts included in the financial statements. Accordingly, we were unable to apply auditing procedures sufficient to determine the extent to which the financial statements have been affected by these conditions.



Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with GAAP, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern within one year after the date that the financial statements are issued or available to be issued.

Management is responsible for maintaining a current plan instrument, including all plan amendments. Management is also responsible for administering the Plan and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements

Our responsibility is to conduct an audit of the Plan's financial statements in accordance with auditing standards generally accepted in the United States of America (GAAS) and to issue an auditor's report. However, because of the matter described in the Basis for Disclaimer of Opinion section of our report, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on these financial statements.

We are required to be independent of the Plan, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits.

Other Matter — Supplemental Schedules Required by ERISA

The supplemental schedules (Schedule H, Line 4a - Schedule of Delinquent Participant Contributions for the year ended December 31, 2022 and Schedule H, line 4i- Schedule of Assets (Held at End of Year) as of December 31, 2022) are presented for purposes of additional analysis and are not a required part of the financial statements but are supplementary information required by the DOL's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Because of the significance of the matter described in the Basis for *Disclaimer of Opinion* section of our report, it is inappropriate to and we do not express an opinion on the supplemental schedules referred above.

BDO USA, P.C.

McLean, Virginia
November 29, 2023

American Association for the Advancement of Science
Defined Contribution Retirement Plan
Statements of Net Assets Available for Benefits

<i>December 31,</i>	2022	2021
Assets		
Investments:		
Investments, at fair value	\$ 190,841,420	\$ 222,996,128
Investments, at contract value	6,964,399	5,972,682
Total investments	197,805,819	228,968,810
Notes receivable from participants	121,213	88,214
Contribution Receivables		
Employee contribution receivable	126,091	105,826
Employer contribution receivable	178,543	156,950
Total Contribution Receivables	304,634	262,776
Net assets available for benefits	\$ 198,231,666	\$ 229,319,800

See accompanying notes to financial statements.

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Statement of Changes in Net Assets Available for Benefits**

<i>Year ended December 31,</i>	<i>2022</i>
Additions:	
Investment loss:	
Net depreciation in fair value of investments	\$ (32,073,688)
Interest and dividends	2,242,070
Total investment loss	(29,831,618)
Interest income on notes receivable from participants	4,617
Other income	59,007
Contributions:	
Participants	3,266,156
Employer	4,641,935
Rollovers	345,892
Total contributions	8,253,983
Total additions, net of investment loss	(21,514,011)
Deductions:	
Benefits paid to participants	9,514,568
Administrative expenses	59,555
Total deductions	9,574,123
Net decrease	(31,088,134)
Net assets available for benefits:	
Beginning of the year	229,319,800
End of the year	\$ 198,231,666

See accompanying notes to financial statements.

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Notes to Financial Statements**

1. Description of Plan

The following description of the American Association for the Advancement of Science ("AAAS" or the "Association") Defined Contribution Retirement Plan (the "Plan") provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

- a) *General.* The Plan, established January 1, 1957, is a defined contribution retirement plan established under the provisions of section 403(b) of the Internal Revenue Code (the "Code") covering all eligible Association employees, as defined in the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA"). The Plan also provides for supplemental retirement accounts, under which participants may make contributions, but to which the Association does not contribute. Benefits are funded by fixed dollar annuities issued by TIAA, the TIAA Real Estate Account, various CREF variable annuities and TIAA and CREF Institutional Mutual Funds. The Plan was amended on January 1, 2014 to clarify the definition of compensation used to determine matching contributions and employer contributions. On April 1, 2017, the Plan was amended to permit Roth elective deferrals. Amendments to the vesting schedule were made effective July 1, 2018 as described in Note 1 (h).

The Plan was amended effective January 1, 2020 to include the following provisions: (1) All new contributions are made to and invested in Retirement Choice and Retirement Choice Plus contracts. (2) All contributions are converted to whole percentages as opposed to fractional percentages or dollar specific amounts. (3) Every enrolled participant is subject to the Automatic Contribution Arrangement ("ACA") with a default base rate at 1% of regular salary unless the participant has elected a higher deferral percentage. The participant has the right to opt out of the ACA default online, but will default to 1% at the beginning of each Plan year. (4) Beginning January 1, 2021, each year, after defaulting to 1% contribution in the first year, the default contribution will automatically increase by 1% until the fourth year is at 4%. (5) Removed the 1,000 hours of service and the last day of service requirements for matching contributions. And (6) adopted participant loan provisions.

- b) *Custodian and Administration of the Plan.* Effective January 1, 2015, TIAA Trust Company, FSB ("Trust Company") is the directed custodian and recordkeeper for the Plan's investment in the Mutual Funds. The investments in the CREF variable annuity contracts and investments in the Mutual Funds are reported as "Interest in Registered Investment Companies" and the TIAA Real Estate Account is reported as "Interest in Pooled Separate Account." All investments are managed by TIAA or an affiliated entity. The AAAS Defined Contribution Retirement Committee determines the appropriateness of the Plan's investment offerings and monitors investment performance. The administrator of the Plan is AAAS.
- c) *Annual Reporting Requirements.* In November 2007, the Department of Labor ("DOL") issued amended regulations eliminating an exemption granted to 403(b) plans from the annual Form 5500 reporting, disclosure and audit requirements under ERISA effective for tax year 2009. Prior to January 1, 2009, the Plan sponsor and TIAA and CREF were not required to, and did not, maintain records at a plan level. Neither the Plan sponsor nor TIAA and CREF have been able to produce sufficient accounting records and supporting documents relating to certain annuity and custodial accounts issued to current and former employees prior to January 1, 2009. As a result, the completeness and the accuracy of the excluded annuity and custodial accounts, related investment income and

American Association for the Advancement of Science
Defined Contribution Retirement Plan
Notes to Financial Statements

distributions related to these accounts, if any, could not be determined.

- d) *Participation.* Employees may participate in the Plan immediately upon hire by the Association. Employees are eligible for employer matching effective the latter of reaching age 21 or at the beginning of the payroll period immediately following the completion of six months of eligibility service. Employees continue to be eligible to participate in the Plan, but will receive no employer match, during an unpaid leave of absence or if disabled under the Association's long term disability program. Once retirement distributions are initiated, no further contributions may be made by the employer to the participant's retirement account.
- e) *Contributions.* Each year, participants may make contributions from Regular Salary, as defined in the Plan, on a pre-tax basis, up to the Internal Revenue Service ("IRS") 402(g) limit. For 2022, the IRS pre-tax contribution limit was the lesser of total compensation or \$20,500. Participants may contribute post-tax contributions to the Plan in accordance with the Plan provisions. Participants who have attained age 50 before the end of the Plan year are eligible to make catch-up contributions up to a maximum of \$6,500, per IRS regulations. Participants are entitled to receive a distribution from another plan as described in section 403(b) of the Code or section 401(k) of the Code that is an eligible rollover distribution under section 402 of the Code. The Plan sponsor will accept such amount under the Plan provided the rollover to the Plan is made either directly from the other plan or by the participant within sixty days of the receipt of the distribution. The Plan will not accept rollovers of after-tax contributions from another plan. Participants direct the investment of their contributions into various investment options offered by the Plan. Effective January 1, 2020, all new contributions are made to and invested in Retirement Choice and Retirement Choice Plus contracts. The Plan currently offers various registered investment companies, a pooled separate account, and several insurance investment contracts as investment options for participants. The Association contributes eight percent of Regular Salary, as defined in the Plan, for current employee participants, as defined in the Plan, regardless of whether the participant contributes, and matches additional employee contributions to the Plan up to four percent (whole percentages only), based on the employee's contribution, of Regular Salary, as defined in the Plan. These amounts are established through salary reduction agreements with the Association. Every enrolled participant is subject to the Automatic Contribution Arrangement ("ACA") with a default base rate at 1% of regular salary unless the participant has elected a higher deferral percentage. The participant has the right to waive out of the ACA default online but will default to 1% at the beginning of each Plan year. Beginning January 1, 2021, each year, after defaulting to 1% contribution in the first year, the default contribution will automatically increase by 1% until the fourth year at 4%. Currently, no employees contribute matching funds to the Plan on a post-tax basis through the Association. The Association's maximum tax-deferred contribution for 2022 was \$36,600 per eligible employee.
- f) *Participant Accounts.* Each participant's account is credited with (i) the participant's contribution, including qualified rollovers, (ii) the Association's contribution designated for the participant, based on the contribution formula provided in the Plan, and (iii) Plan earnings (losses), and charged with an allocation of administrative expenses. Allocations are based on participant earnings or account balances, as defined.

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
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- g) *Vesting.* The Plan was amended on July 1, 2018 to add a vesting schedule for matching contributions and employer contributions. Effective July 1, 2018, for all participants in the Plan hired after July 1, 2018, employer contributions will vest at 20% each year over five years. Contributions, plus earnings thereon, for all participants hired prior to July 1, 2018 are fully vested and non- forfeitable when such Plan contributions are made.
- h) *Plan Loans.* Participants have the ability to enter into loans directly with TIAA and CREF, using their contributions as collateral for the loan. The participant must maintain 110% of the loan as collateral to secure the loan in the event of default. The minimum loan amount is \$1,000 and the maximum loan amount is \$50,000 or 45% of a participant's vested account balance (whichever is less). The maximum term of a Plan loan is five years, or ten years if the loan is for the purchase of a principal residence. The longest Plan loan matures December 2030. As of December 31, 2022 and 2021, participants had outstanding loans of \$107,392 and \$163,640, respectively, and participants had pledged \$118,131 and \$180,004 of Plan assets as collateral, respectively. Interest is paid by the participants to TIAA and CREF with rates ranging from 4.00% to 5.61% for years ended December 31, 2022 and 2021. The collateral is held in the TIAA Traditional Annuity as either part of a Group Supplemental Retirement Annuity ("GSRA") contract or as a separate Retirement Loan contract. Where a Plan loan goes into default, the collateral associated with the loan would not be distributed to TIAA and CREF unless the participant was otherwise eligible for a distribution. The loans are not shown in the Plan's statements of net assets available for benefits as the loans are not made from Plan assets and are therefore not considered assets of the Plan.
- i) *Notes Receivable from Participants.* Participants are permitted to borrow from their accounts a minimum of \$1,000 up to a maximum equal to the lesser of 50% of the vested balance or \$50,000 reduced by the participant's highest outstanding note balance during the 12-month period ending on the date of the note. A note is secured by the balance in the participant's account and bears interest at a rate commensurate with market rates for similar notes, defined as the prime rate plus one percent. The notes bear interest rates that ranged from 4.25% to 8.50% for the year ended December 31, 2022. Principal and interest are paid through bi-weekly payroll deductions. As of December 31, 2022 and 2021, participant loan balances totaled \$121,213 and \$88,214, respectively.

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
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- j) *Payment of Benefits.* A participant may elect to receive retirement benefits under any of the forms of benefit available under the relevant funding vehicle, as defined in the Plan. However, notwithstanding any other provision in the Plan, distributions of employer contributions may be paid only when a participant attains age 59 1/2, separates from service, dies or becomes terminally ill as defined in the Plan. Distributions of participant contributions may be paid only when a participant attains age 59 1/2, separates from service, dies, becomes terminally ill as defined in the Plan, or has a qualifying hardship, as defined in the Plan. Upon retirement, participants may elect to transfer the accumulations in their Plan investments to a TIAA Retirement Annuity.
- k) *Plan Assets.* Participants in the Plan may elect to allocate their contributions among the TIAA Traditional Annuity, TIAA Real Estate, CREF Variable Annuities and Institutional Mutual Funds. Employer contributions may also be allocated to any of the above choices. The allocations of contributions among investment options may be changed by the participant at any time by notifying TIAA and CREF. Contributions to the TIAA Real Estate account are placed in an insurance company pooled separate account which invests in various real estate interests. Contributions to the CREF variable annuities and Institutional Mutual Funds are used to purchase shares in various types of annuities and mutual funds, including stocks, bonds and money market funds. Contributions to the TIAA Traditional Annuity are used to purchase a guaranteed amount of future retirement benefits.

The TIAA Traditional Annuity is a guaranteed (by TIAA's claim paying ability) fixed annuity which guarantees principal and pays a guaranteed minimum interest. Additional amounts above the guaranteed minimum interest rate may be declared at the discretion of the TIAA Board of Trustees on a year-by-year basis. When declared, the additional amounts remain in effect for the declaration year that begins each March 1, and are not guaranteed for future years. Together the guaranteed minimum and additional amounts make up the crediting rate in the accumulation phase. TIAA groups premium dollars received over defined periods into vintages for the purposes of determining the crediting rate for the applicable declaration year during the accumulation period.

TIAA Traditional investments are offered through the Retirement Annuity ("RA") and Group Supplemental Retirement Annuity ("GSRA") contracts. The TIAA Traditional Annuity holdings within the RA contracts have liquidity restrictions and are non-benefit responsive. Non-benefit responsive contracts are reported at fair value. For RA contracts, the contract value as reported is the best approximation of fair value. Distributions, withdrawals, and transfers out of these contracts can only be made in 10 annual installments through Transfer Payout Annuities ("TPAs"). The TIAA Traditional Annuity holdings within the GSRA contracts contain no liquidity restrictions, are fully benefit-responsive, and are reported at contract value.

Contract value is the relevant measurement for that portion of the net assets available for benefits attributable to fully benefit-responsive investment contracts of a defined contribution retirement plan, because that is the amount participants would receive if they initiated permitted transactions under the terms of the Plan.

During 2022, the average crediting rate for regular annuities in both the accumulation and payoff phases was between 1.0% and 3.0%, depending upon the contract.

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Defined Contribution Retirement Plan
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- l) *Forfeitures.* Forfeitures of the nonvested portion of the Plan balance resulting from termination of employment may be used reduce the Plan's future contributions to the Plan. Forfeitures in the amount of \$88,652 were used to reduce contributions to the Plan in 2022. The Plan's forfeited nonvested account balance was \$88,511 and \$56,311 as of December 31, 2022 and 2021.

2. Summary of Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared based on the accrual basis of accounting in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP).

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ materially, in the near term, from those estimates.

Investment Valuation and Income Recognition

Investments are reported at fair value except for the Plan's direct investment in fully-benefit responsive investment contracts which are reported at contract value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Management reviews and evaluates the fair values provided by TIAA and CREF and agrees with the valuation methods and assumptions used. See Note 4 for further information related to fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

The Plan presents in the statement of changes in net assets available for benefits the net depreciation in the fair value of its investments, which consists of the realized gains (losses) and the unrealized depreciation on those investments.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus accrued unpaid interest. If a participant ceases to make loan repayments and the Plan Administrator deems the participant loan to be in default, the participant loan balance is reduced, and a benefit payment is recorded.

Payment of Benefits

Benefits are recorded when paid.

Administrative Expenses

Certain administrative expenses of the Plan are paid from the accounts of Plan participants for actions initiated by the participants, such as loan origination fees. These administrative expenses are deducted directly from their account. Participants pay the investment costs of the mutual funds they use to invest their account balance, and for many of the Plan's designated investments, a portion of each mutual fund's

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Notes to Financial Statements**

expense ratio is paid to TIAA and CREF for retirement plan and participant services and is included in net depreciation in fair value of investments. Plan earnings in the form of revenue credits are generated from investment options and are credited to the Plan by TIAA and CREF where they are classified as Other Income. Other administrative expenses are paid by the Association and the Plan through the revenue sharing account.

Recently Adopted Authoritative Guidance

In June 2022, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2022-03, *Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions*, to clarify that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and is not considered in measuring the fair value of the equity security in accordance with ASC 820, *Fair Value Measurements*. ASU No. 2022-03 also adds certain disclosures for equity securities subject to contractual sales restrictions. ASU No 2022-03 is effective and applied prospectively for public business entities for fiscal years beginning after December 15, 2023, and for all other entities is effective and applied prospectively for fiscal years beginning after December 15, 2024. Plan management is in the process of evaluating the effect of this ASU on the plan's financial statements.

3. Information Certified by TIAA and CREF

Certain information related to investments and notes receivable from participants disclosed in the accompanying financial statements and ERISA-required supplemental schedules, held at December 31, 2022 and 2021, and net depreciation in fair value of investments, interest and dividends, and interest income on notes receivable from participants for the year ended December 31, 2022, was obtained by management and agreed to or derived from information certified as complete and accurate by TIAA and CREF a qualified institution.

At the request of the Plan Administrator, the Plan's independent auditors did not perform auditing procedures with respect to this certified investment information, except for comparing such certified investment information to the related investment information in the financial statements, including reading the disclosures related to the investment information to assess whether they are in accordance with the presentation and disclosure requirements of GAAP, and in the ERISA-required supplemental schedules, including assessing whether the supplemental schedules are in conformity with the DOL's Rules and Regulations for Reporting and Disclosure under ERISA.

4. Fair Value Measurements

U.S. GAAP defines fair value measurement and provides the framework for measuring fair value, and define fair value as the exchange price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability (an exit price) in an orderly transaction between market participants on the measurement date. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of fair value hierarchy are described as follows:

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Notes to Financial Statements**

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access. The Plan's level 1 asset includes TIAA and CREF institutional mutual funds.

Level 2 Inputs to the valuation methodology include:

- i) quoted prices for similar assets or liabilities in active markets;
- ii) quoted prices for identical or similar assets or liabilities in inactive markets;
- iii) inputs other than quoted prices that are observable for the asset or liability;
- iv) inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability. Level 2 assets held by the Plan include investments held in real estate pooled separate accounts and CREF variable annuities.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Level 3 assets held by the Plan include investments held in TIAA Traditional Annuities.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2022 and 2021.

TIAA Traditional Annuities - RA: The funds are valued at the amount that would be received at the reporting date if amounts were withdrawn or funds transferred from the Plan prior to their maturity. The accumulated cash contributions and interest credited the Plan's contracts, less any withdrawals represent fair value. The annuity is not available for sale or transfer on any securities exchange. Accordingly, transactions in similar investments are not observable.

Institutional Mutual Funds: The funds invest principally in equity securities, fixed income instruments, other mutual funds and short-term instruments in accordance with each fund's investment objectives. Fund holdings are generally reported at net asset value ("NAV") of shares held by the Plan at year end and are valued daily using market quotations or prices obtained from independent pricing services, except those held by the TIAA and CREF Money Market Fund, whose holdings are valued at amortized cost. The TIAA and CREF Money Market Fund is managed to maintain a constant value, though not guaranteed, of \$1 per share.

The TIAA-CREF Self-Directed brokerage account consists of mutual funds. Fund holdings have an established NAV.

**American Association for the Advancement of Science
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CREF Variable Annuities: CREF is registered with the Securities and Exchange Commission as an open-end management investment company. It consists of eight investment portfolios: Stock, Global Equities, Growth, Equity Index, Bond Market, Inflation-Linked Bond, Social Choice and Money Market. These assets are classified as Level 2 because though the funds have an established NAV, they are not publicly traded and have certain restrictions impacting participants' ability to transact.

TIAA Real Estate pooled separate account: The investments in the pooled separate account are stated at fair value as determined in accordance with the policies and procedures rendered by the Investment Committee of TIAA. The value of the units held in the real estate pooled separate account is based on the market value of the underlying real estate holdings which are valued principally utilizing external appraisals and involves a significant amount of judgment. Account investments and fund holdings are primarily valued using market quotations as prices are obtained from independent pricing sources that employ various pricing methods to value the investments including matrix pricing. These assets are classified as Level 2 because though the funds have an established NAV, they are not publicly traded and have certain restrictions impacting participants' ability to transact.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables set forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2022 and 2021.

Investments at Fair Value as of December 31, 2022

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Traditional Annuities	\$ -	\$ -	\$ 38,401,942	\$ 38,401,942
Pooled Separate Accounts:				
Real Estate ¹	-	10,636,094	-	10,636,094
Inst'l Mutual Funds	54,362,091	-	-	54,362,091
Variable Annuities ²	-	87,430,706	-	87,430,706
Self-Directed	10,587	-	-	10,587
Total investments at fair value	<u>\$ 54,372,678</u>	<u>\$ 98,066,800</u>	<u>\$ 38,401,942</u>	<u>\$ 190,841,420</u>

Investments at Fair Value as of December 31, 2021

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Traditional Annuities	\$ -	\$ -	\$ 38,153,239	\$ 38,153,239
Pooled Separate Accounts:				
Real Estate ¹	-	9,703,088	-	9,703,088
Inst'l Mutual Funds	59,643,266	-	-	59,643,266
Variable Annuities ²	-	115,496,535	-	115,496,535
Total investments at fair value	<u>\$ 59,643,266</u>	<u>\$ 125,199,623</u>	<u>\$ 38,153,239</u>	<u>\$ 222,996,128</u>

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Notes to Financial Statements**

¹ This category includes investment in a pooled separate account investing in real estate and real estate-related investments. Although the underlying assets of the pooled separate account cannot be quickly sold and converted to liquid assets, the TIAA general account provides a liquidity guarantee to meet participant redemption transfer or cash withdrawal requests varying from one to three days. Redemptions out of this investment are limited to one per quarter. Participants are prevented from making internal transfers into the Real Estate Account if the transfer would cause the total value of the participant's accumulation in the Real Estate Account (under all contracts issued to that participant) to exceed \$150,000.

² This category represents investments in variable annuities investing in equity index, fixed income, growth equities, international equities, equity, money market and other, as noted. Investments are valued at NAV. All variable annuities have daily liquidity and are not subject to any redemption restrictions at the measurement date. The funds have different trading terms varying from one to three days. With the exception of the Money Market, participants will be locked out of the variable annuity for 90 days if a purchase, sale or repurchase within that variable annuity is made within a 60-day period.

The table below sets forth a summary of changes in the fair value of the Plan's level 3 assets for the years ended December 31:

TIAA Traditional Annuities - RA

	2022	2021
Purchases	\$ 5,199,239	\$ 2,138,450
Withdrawals	(6,530,033)	(3,073,617)

The following table presents information about the valuation techniques used by management and using information provided by TIAA and CREF to measure fair value, significant unobservable inputs and the range of values for those inputs related to the Plan's investment in assets categorized as Level 3 in the fair value hierarchy at December 31, 2022 and 2021:

Type	Fair Value 2022	Fair Value 2021	Principal Valuation Technique	Significant Unobservable Inputs	Range of Significant Input Values
TIAA Traditional Annuity - RA	\$38,401,942	\$38,153,239	Discounted cash flow Theoretical transfer (exit value)	Risk-adjusted discount rate applied	RA – 1.00% - 3.00%

TIAA Traditional Annuity account balances within the RA contracts are reported at contract value which approximates fair value. Contract value is the aggregation of contributions, plus interest, less withdrawals, if any. Crediting rates are a combination of a guaranteed rate and an annually established discretionary rate. Additionally, the discretionary rate applied to contributions received during a reporting period may vary from the discretionary rate applied to account balances at the end of the prior reporting period.

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Contract value approximates a discounted cash flow value calculated using an appropriate risk-adjusted market discount rate which correlates closely with TIAA Traditional Annuity's historical crediting rates.

5. Investments at Contract Value

For the traditional annuity GSRA contracts that are fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the guaranteed investment contract. The traditional annuity contracts are presented on the face of the statements of net assets available for benefits at contract value. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value without restriction.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The crediting interest rate is based on a formula agreed upon with the issuer, but it may not be less than 3 percent. Such interest rates are reviewed on an annual basis for resetting. Additional amounts may be declared on a year-by-year basis by the TIAA Board of Trustees.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to the Plan documents (including complete or partial plan termination or merger with another plan), (2) changes to the Plan's prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the Plan sponsor or other Plan sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the Plan, or (4) the failure of the Plan to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The Plan Administrator does not believe that any events which would limit the Plan's ability to transact at contract value with participants are probable of occurring.

The contracts do not permit the insurance company to terminate the agreement prior to the scheduled maturity date.

6. Parties-in-Interest and Related-Party Transactions

Plan investments are traditional annuities in unallocated insurance contracts, units of variable annuities, a pooled separate account and institutional mutual funds managed by TIAA and CREF. TIAA and CREF acts as the service provider for these investments as defined by the Plan; therefore, these transactions all qualify as party-in-interest transactions. The transactions in the revenue sharing account in the Plan managed by TIAA and CREF are also party-in-interest transactions. Notes receivable from participants also qualify as parties-in-interest transactions.

7. Plan Termination

Although it has not expressed any intent to do so, the Association has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of a complete or partial termination of the Plan or a discontinuance of contributions, all individual accounts will be fully vested to the extent funded.

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Defined Contribution Retirement Plan
Notes to Financial Statements**

8. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Market values of investments may decline for any number of reasons, including changes in prevailing market and interest rates, increases in defaults and credit rating downgrades. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

9. Tax Status

The Plan uses a volume submitter plan from TIAA and CREF, which received an advisory letter from the Internal Revenue Service (the IRS) on August 7, 2017, which states that the volume submitter plan, as then designed, satisfies the applicable provisions under Section 403(b) of the IRC. Although the Plan has been amended since the date of the advisory letter, the Plan's management believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC. Therefore, no provision for income tax has been included in the Plan's financial statements.

GAAP requires plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan Administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2022 and 2021, there are no uncertain positions taken or expected to be taken that would require recognition of the liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

10. Non-Exempt Transactions

During the Plan year ended December 31, 2022, plan management identified an untimely remittance of participant contributions to the Plan in the amounts of \$568. Management remitted these contributions to the Plan after the required time frame and is planning to remit the lost earnings associated with the late remittances. These transactions constitute non-exempt party-in-interest transactions or prohibited transactions as defined by ERISA.

11. Subsequent Events

The Plan Administrator has evaluated subsequent events through November 29, 2023, the date the financial statements were available to be issued. The Plan Administrator is not aware of any subsequent events which would require recognition or disclosure in the financial statements.

**American Association for the Advancement of Science
Defined Contribution Retirement Plan
Schedule H, Line 4a - Schedule of Delinquent Participant Contributions**

EIN: 53-0196568

Plan number: 0001

Year Ended December 31, 2022

Total That Constitutes Nonexempt Prohibited Transactions - \$568

Participant Contributions
Transferred Late to Plan

Year	Check Here if Late Participant Loan Repayments are Included []	Contributions Not Corrected	Contributions Corrected Outside VFCP*	Contributions Pending Correction in VFCP	Total Fully Corrected Under VFCP * and PTE ** 2002-51
2022	\$568	\$568	\$ -	\$ -	\$ -

* *Voluntary Fiduciary Correction Program (DOL)*

** *Prohibited Transaction Exemption (DOL)*

American Association for the Advancement of Science
Defined Contribution Retirement Plan
Schedule H, Line 4i - Assets (Held at End of Year)
December 31, 2022

EIN: 53-0196568
Plan number: 0001

(a)	(b)	(c)	(d)	(e)
	Identity of "Issuer", Borrower, Lessor, or Similar Party	Description of Investments Including Maturity Date, Rate of Interest, Collateral and Par or Maturity Value	Cost *	Current Value
** Insurance Company General Contract				
	TIAA Traditional Annuity - RA	Unallocated insurance contracts	\$	38,401,942
** TIAA Traditional Annuity - GSRA		Unallocated insurance contracts		6,964,399
** TIAA Real Estate		Pooled Separate Account		10,636,094
Institutional Mutual Funds Retirement Class				
	PIMCO RealPath Blend 2025 Inst	Registered Investment Company		6,112,955
	PIMCO RealPath Blend 2030 Inst	Registered Investment Company		5,477,018
	PIMCO RealPath Blend 2035 Inst	Registered Investment Company		5,090,309
	PIMCO RealPath Blend 2040 Inst	Registered Investment Company		9,956,757
	PIMCO RealPath Blend 2045 Inst	Registered Investment Company		6,649,857
	PIMCO RealPath Blend 2050 Inst	Registered Investment Company		5,838,240
	PIMCO RealPath Blend 2055 Inst	Registered Investment Company		3,468,091
	PIMCO RealPath Blend 2060 Inst	Registered Investment Company		1,116,863
	PIMCO RealPath Blend Inc Inst	Registered Investment Company		2,754,293
	Dodge & Cox Income Fund	Registered Investment Company		940,990
	BlackRock Technology Opps R	Registered Investment Company		210,694
	Columbia Dividend Income R	Registered Investment Company		1,885,374
	Janus Henderson Dev Wrld Bnd I	Registered Investment Company		3,409
	Madison Mid Cap Fund Class R6	Registered Investment Company		828,424
	Vanguard Treasury MoneyMkt Inv	Registered Investment Company		836,621
	Vanguard Small-Cap Idx Adm	Registered Investment Company		431,952
	Vanguard Developd Mkts Idx Adm	Registered Investment Company		2,652,755
	PGIM High Yield R6	Registered Investment Company		107,489
** CREF Variable Annuities				
	CREF Stock R2	Variable Annuities		33,756,351
	CREF Growth R2	Variable Annuities		12,579,258
	CREF Equity Index R2	Variable Annuities		12,694,892
	CREF Global Equities R2	Variable Annuities		8,298,160
	CREF Core Bond R2	Variable Annuities		6,879,489
	CREF Social Choice R2	Variable Annuities		8,156,409
	CREF Inflation-Linked Bond R2	Variable Annuities		3,039,252
	CREF Money Market R2	Variable Annuities		2,026,895
** TIAA-CREF Self Directed Acct		Other		10,587
Total Investments Per Financial Statements				197,805,819
	Participant Loans	Interest rates from 4.25% to 5.80%	-	121,213
Total Investments Per Form 5500				\$ 197,927,032

* Cost is omitted because it is not required for participant-directed investments.

** Denotes a party-in-interest as defined by ERISA.

Plan Name	American Association for the Advancement of Science Defined Contribution Retirement Plan
Plan Sponsor EIN	53-0196568
ERISA Plan #	001
Plan Year Ending	December 31, 2022

The required attachment marked with an "X" in the Attachment column is included within the Accountant's Opinion attachment to Sch. H, Part III, Line 3, which consists of the entire audit report issued by the plan's Independent Qualified Public Accountant (IQPA).

Form/Schedule	Line #	Description	Attachment
5500 Sch. H	Line 3	Financial statements used in formulating the IQPA's opinion	X
5500 Sch. H	Line 4i	Schedule of Assets (Held at End of Year)	X
5500 Sch. H	Line 4i	Schedule of Assets (Acquired and Disposed of Within Year)	
5500 Sch. H	Line 4j	Schedule of Reportable Transactions	
5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	X

Plan Name	American Association for the Advancement of Science Defined Contribution Retirement Plan
Plan Sponsor EIN	53-0196568
ERISA Plan #	001
Plan Year Ending	December 31, 2022

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Plan Name	American Association for the Advancement of Science Defined Contribution Retirement Plan
Plan Sponsor EIN	53-0196568
ERISA Plan #	001
Plan Year Ending	December 31, 2022

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