Sept. 6, 2021

SAGO

Sent via electronic delivery to: SAGO@who.int

RE: Letter of Interest in SAGO, from Charles Aarons, MD

I recognize the majority of applicants for the SAGO will be experts in virology, infectious disease and molecular biology. However, in a Committee of up to 25 individuals, there can be a useful function in having a relative "lay" member.

I am a retired MD residing in Anchorage, Alaska. What is not obvious from my CV is that I have maintained a very high level of academic interest in infectious disease, molecular biology, earth science (especially climate change science), and less relevant subjects including geology in general, planetary physics, astrophysics and theoretical physics. I read peer-reviewed journal articles almost daily in one or another of the above subjects. Naturally, the amount of time I spend on this has markedly increased the last 2 years, since I retired from work daily in a clinical setting. I also have a profound level of interest and knowledge of human history, in addition to the history of the Earth and Solar System. I read my first "adult" history book in 1958 and have not stopped since.

I can bring to the Committee a depth of multidisciplinary knowledge in earth science, particularly climate change. Climate change is intricately interwoven with emerging infectious diseases and I can offer insight into the relationships between climate change with economic activity and hunting-gathering as well as the interwoven links between emerging infection diseases at-risk indigenous populations.

I have a decade of experience practicing primary care medicine in a circumpolar cultural setting where the majority of my patients depended on subsistence activity for food security. I practiced for three more decades in Alaska's largest city, where I continued to care for many of the same patients. My family, patients, and I have depended on local land and sea resources for personal food sustenance and economic sustenance for many years. I have close familial ties to Indigenous Inuit who have lived in Alaska for millenia and have seen the effects of climate change on both food security and disease patterns change over the course of a single lifetime.

The effects of climate change are increased by the well-known "polar amplification" and are already obvious in rural Alaska. Hunting-gathering and primary producer economic activities such as commercial fishing have already been severely impacted.

I have traveled to many places in the world over the last 58 years; different cultures, all continents except Antarctica; mostly land travel. I am very comfortable with molecular biology, infectious disease and virology. I believe that the specific gaps in technical knowledge of emerging pathogens in my knowledge base are counterbalanced by a breadth and depth of knowledge and experience in fields that are indispensable for the Committee.

I thank you for your consideration. Please feel welcome to contact me at +1 (907) 360-8990 or by email at m37@gci.net.

Charles Aarons M.D.

Licensed to practice Medicine in State of Alaska since 1979

1730 Shore Drive, Anchorage, Alaska 99515 USA

+1-907-360-8990

m37@gci.net

Education

1976 University of California San Francisco, M.D. degree

1971-1972 Pre-Med courses at Pomona College

1971 Pomona College, B.S., Physics cum laude

Honors & Awards

1971 National Science Foundation Graduate Research Fellowship

Publication: Sarah M. Aarons, et al, Charles Aarons (2017) "Geochemical characterization of critical dust regions in the American West", Geochimica et Cosmochimica Acta, 215, 141-161.

Professional Positions

8/19-present	Retired from primary care office practice.	

1987-2019 Primary care medicine and part owner at Medical Park Family Care, a 6-9 MD sized practice in a city of ~250,000 (Anchorage) and remote state of only ~ 750,000.

8/82-10/87 Solo private practice in Dillingham, Alaska, a small remote town of ~2000 in a vast region called Bristol Bay, where the majority of (mostly Indigenous) inhabitants economically depend on the largest runs of sockeye salmon in the world, and the majority of the population depends partially on hunting-gathering for food security.

6/82-7/92 Commercial salmon fishing in Bristol Bay

8/78-6/82 Commissioned Officer physician in USPHS, 1 out of either 3 or even 2 physicians responsible for all aspects of medical care in a remote region of Alaska. Communicated daily with village community Health Aides, travelled by small plane and boat to up to 14 Indigenous villages, several times per year to each village.

6/77-6/78 Internship Internal Medicine/Pediatrics, Virginia Mason Hospital and Children's Orthopedic Hospital, Seattle Washington.

12/76-5/77: "Acting Physician's Assistant" for USPHS in Tanana, Alaska, which is a village, again off the road system, which at that time had a small hospital, responsible for the inhabitants of Interior Alaska north of the Yukon River (roughly 400,000 sq km). Conducted solo medical field trips to approximately 13 villages, all Indigenous, all Athabaskan except for 1 Inuit (Nunamuit). All highly dependent

on hunting-gathering for food security. Travel by small plane, or snow machine.

Languages

English; Spanish (almost fluent); French (conversational)

DECLARATION OF INTERESTS FOR WHO EXPERTS



WHO's work on global health issues requires the assistance of external experts who may have interests related to their expertise. To ensure the highest integrity and public confidence in its activities, WHO requires that experts serving in an advisory role disclose any circumstances that could give rise to a potential conflict of interest related to the subject of the activity in which they will be involved.

All experts serving in an advisory role must disclose any circumstances that could represent a potential conflict of interest (i.e., any interest that may affect, or may reasonably be perceived to affect, the expert's objectivity and independence). You must disclose on this Declaration of Interests (DOI) form any financial, professional or other interest relevant to the subject of the work or meeting in which you have been asked to participate in or contribute towards and any interest that could be affected by the outcome of the meeting or work. You must also declare relevant interests of your immediate family members (see definition below) and, if you are aware of it, relevant interests of other parties with whom you have substantial common interests and which may be perceived as unduly influencing your judgement (e.g. employer, close professional associates, administrative unit or department). Please note that not fully completing and disclosing all relevant information on this form may, depending on the circumstances, lead WHO to decide not to appoint you to WHO advisory bodies/functions in the future.

Please complete this form and submit it to WHO Secretariat if possible at least 4 weeks but no later than 2 weeks before the meeting or work. You must also promptly inform the Secretariat if there is any change in this information prior to, or during the course of, the meeting or work. All experts must complete this form before participation in a WHO activity can be confirmed. Please note that not fully completing and disclosing all relevant information on this form may, depending on the circumstances, lead WHO to decide not to appoint you to WHO advisory bodies/functions in the future.

Answering "Yes" to a question on this form does not automatically disqualify you or limit your participation in a WHO activity. Your answers will be reviewed by the Secretariat to determine whether you have a conflict of interest relevant to the subject at hand. One of the outcomes listed in the next paragraph can occur depending on the circumstances (e.g., nature and magnitude of the interest, timeframe and duration of the interest).

The Secretariat may conclude that no potential conflict exists or that the interest is irrelevant or insignificant. If, however, a declared interest is determined to be potentially or clearly significant, one or more of the following three measures for managing the conflict of interest may be applied. The Secretariat (i) allows full participation, with public disclosure of your interest; (ii) mandates partial exclusion (i.e., you will be excluded from that portion of the meeting or work related to the declared interest and from the corresponding decision making process); or (iii) mandates total exclusion (i.e., you will not be able to participate in any part of the meeting or work).

All potentially significant interests will be **disclosed** to the other participants at the start of the activity and you will be asked if there have been any changes. A summary of all declarations and actions taken to manage any declared interests will be **published** in resulting reports and work products. Furthermore, if the objectivity of the work or meeting in which you are involved is subsequently questioned, the contents of your DOI form may be made available by the Secretariat to persons outside WHO if the Director-General considers such disclosure to be in the best interest of the Organization, after consulting with you. Completing this DOI form means that you agree to these conditions.

If you are unable or unwilling to disclose the details of an interest that may pose a real or perceived conflict, you must disclose that a conflict of interest may exist and the Secretariat may decide that you be totally recused from the meeting or work concerned, after consulting with you.

Name:	
Institution:	
Email:	

Date and title of meeting or work, including description of subject matter to be considered (if a number of substances or processes are to be evaluated, a list should be attached by the organizer of the activity):

Please answer each of the questions below. If the answer to any of the questions is "yes", briefly describe the circumstances on the last page of the form.

The term "you" refers to yourself and your immediate family members (i.e., spouse (or partner with whom you have a similar close personal relationship) and your children). "Commercial entity" includes any commercial business, an industry association, research institution or other enterprise whose funding is significantly derived from commercial sources with an interest related to the subject of the meeting or work. "Organization" includes a governmental, international or non-profit organization. "Meeting" includes a series or cycle of meetings.

01	cycle of meetings.		
	EMPLOYMENT AND CONSULTING Within the past 4 years, have you received remuneration from a commercial entity or other organization with an interest related to the subject of the meeting or work?		/
1a	Employment	Yes 🗌	No 🚺
16	Consulting, including service as a technical or other advisor	Yes 🗌	No 🗹
	RESEARCH SUPPORT Within the past 4 years, have you or has your research unit received support from a commercial entity or other organization with an interest related to the subject of the meeting or work?		
2a	Research support, including grants, collaborations, sponsorships, and other funding	Yes 🗌	No 🛂
2b	Non-monetary support valued at more than US \$1000 overall (include equipment, facilities, research assistants, paid travel to meetings, etc.) Support (including honoraria) for being on a speakers bureau, giving speeches or training for a commercial entity or other organization with an interest related to the subject of the meeting or work?	Yes 🗌	No 🗹
	INVESTMENT INTERESTS		
	Do you have current investments (valued at more than US \$5 000 overall) in a commercial entity with an interest related to the subject of the meeting or work? Please also include indirect investments such as a trust or holding company. You may exclude mutual funds, pension funds or similar investments that are broadly diversified and on which you exercise no control.		
3a	Stocks, bonds, stock options, other securities (e.g., short sales)	Yes 🗌	NoΠ
	Commercial business interests (e.g., proprietorships, partnerships, joint ventures, board memberships, controlling interest in a company)	Yes 🗌	
	INTELLECTUAL PROPERTY Do you have any intellectual property rights that might be enhanced or diminished by the outcome of the meeting or work?		
4a	Patents, trademarks, or copyrights (including pending applications)	Yes 🗌	No 🔽
4b	Proprietary know-how in a substance, technology or process	Yes 🗌	No 🖸
	PUBLIC STATEMENTS AND POSITIONS (during the past 3 years)		
5a	As part of a regulatory, legislative or judicial process, have you provided an expert opinion or testimony, related to the subject of the meeting or work, for a commercial entity or other organization?	Yes 🗌	No 🇹
5b	Have you held an office or other position, paid or unpaid, where you represented interests or defended a position related to the subject of the meeting or work?	Yes 🗌	No 🖸
	ADDITIONAL INFORMATION		
6a	If not already disclosed above, have you worked for the competitor of a product that is the subject of the meeting or work, or will your participation in the meeting or work enable you to obtain access to a competitor's confidential proprietary information, or create for you a personal, professional, financial or business competitive advantage?	Yes 🗌	No 🗹
6b	To your knowledge, would the outcome of the meeting or work benefit or adversely affect interests of others with whom you have substantial common personal, professional, financial or business interests (such as your adult children or siblings, close professional colleagues, administrative unit or department)?		No T

6c Excluding WHO, has a connection with this W		r contributed towards yo] No 🛮
6d Have you received any publicly on the subject	payments (other than for to of this WHO meeting or v		a for speaking Yes] No
6e Is there any other aspec	ct of your background or p] No
7. TOBACCO OR TOB subject of the meeting of	ACCO PRODUCTS (ans		T	
Within the past 4 years funding from, or had as	, have you had employmen ny other professional relati ufacture, distribution or sa	ionship with, an entity of	firectly involved products or] No 🗹
EXPLANATION check above and briefly of interest or if you do no assumed to be significant.	t provide the amount o	es on this page. <u>If you</u>	do not describe the n	ature of an
Nos. 1 - 4:				
Type of interest, question number and category (e.g., Intellectual Property 4.a copyrights) and basic descriptive details.	Name of company, organization, or institution	Belongs to you, a family member, employer, research unit or other?	Amount of income or value of interest (if not disclosed, is assumed to be significant)	Current interest (or year ceased)
See	euclos	Tue		remendants - Philophinassassassassassanduring dan descriptiones
	medianas fundamentanas		medianas A Prophings and Angelongs and Angel	mediamas Afrajónssinamatiský vojevo
	Addresses Alexandra (Managarana)		And the second s	Additional materials and a Millional state of the state o
Nos. 5-6: Describe the subje	ct, specific circumstance	s, parties involved, tin	e frame and other rele	evant details
Nos. 5-6: Describe the subje	ct, specific circumstance	s, parties involved, tim	e frame and other rele	evant details
Nos. 5-6: Describe the subje	et, specific circumstance	s, parties involved, tim	e frame and other rele	evant details
Nos. 5-6: Describe the subje	ect, specific circumstance	s, parties involved, tim	e frame and other rele	evant details
Nos. 5-6: Describe the subje	et, specific circumstance	s, parties involved, tim	e frame and other rele	evant details
Nos. 5-6: Describe the subje	ect, specific circumstance	s, parties involved, tim	e frame and other rele	evant details
Nos. 5-6: Describe the subje	et, specific circumstance	s, parties involved, tim	e frame and other rele	evant details

<u>CONSENT TO DISCLOSURE</u>. By completing and signing this form, you consent to the disclosure of any relevant conflicts to other meeting participants and in the resulting report or work product.

<u>DECLARATION</u>. I hereby declare on my honour that the disclosed information is true and complete to the best of my knowledge.

Should there be any change to the above information, I will promptly notify the responsible staff of WHO and complete a new declaration of interests form that describes the changes. This includes any change that occurs before or during the meeting or work itself and through the period up to the publication of the final results or completion of the activity concerned.

Date: 2 (gpt. 2021

Signature



Portfolio holdings as of September 01, 2021 Summary of Portfolio Holdings

	34.96	74,334.96	454,690.00 \$2.907.592.71	380,355.04 \$2.583.061.00	Balanced Total Portfolio
7,612.91	19,54%	74,334,96	454,690,00	380,355,04	F Other
	0.00%	0,00	0,00	0.00	E Non-Traditional
	0.00%	0.00	0,00	0.00	D Commodities
17,037.91	-7.38%	-30,153.10	378,687.09	408,840.19	International
1,882.32	25.32%	6,013.84	29,762.92	23,749.08	Global
59,908.4	20.18%	273,758.88	1,630,187.96	1,356,429.08	SM
78,828,68	13.95%	249,619.62	2,038,637.97	1,789,018,35	C Equity
2,926.26	1.17%	577.13	49,726.00	49,148.87	US
2,92	1.17%	577,13	49,726,00	49,148,87	B Fixed Income
0.00	0.00%	0,00	364,538.74	364,538.74	Cash
0.00	0.00%	0.00	364,538,74	364,538,74	A Cash
income (\$)	gain/loss (%)	gain/loss (\$)	09/01/2021 (\$)	Cost basis (\$)	material and the second and the seco



UBS

Portfolio holdings - as of September 01, 2021 (continued)

Details of portfolio holdings

Total Portfolio				Cost basis (\$)	Market value (\$)	Unrealized gain/loss (\$)	Unrealized Unrealized gain/loss (\$) gain/loss (%)	Est. annual Current income (\$) vield (%)	Current vield (%)	% of	% of
				\$2,583,061.00	\$2,907,592.71	\$324,531.71	12.56%	\$89,367,84	3.07%	100%	100%
Cash	Quantity	Purchase price (\$) / Avg Price	Price on 09/01/2021 (\$)	Cost basis (\$)	Market value (\$)	Unrealized	Unrealized Unrealized	Est. anhual Current	Current	% of	Portfolio
UBS BANK USA BUSINESS ACCOUNT UBS BANK USA DEPOSIT ACCOUNT Total Cash	283,049.26 81,489.48	1.00	1,00	283,049.26 81,489.48 \$364,538.74	283,049,26 81,489,48 \$364,538,74	0.00 0.00	0.00% 0.00%	0.00 0.00		2000 X	9.73% 2.81%
Total Cash				\$364,538,74	\$364,538.74	\$0.00	0,00%	\$0.00	0.00%	0.00% 100.00%	12.54%
Fixed Income	Quantity	Purchase price (\$) / Avg Price	Price on 09/01/2021 (\$)	Cost basis (\$)	Market value (\$)	Unrealized Unrealized gain/loss (\$) gain/loss (%)	Unrealized gain/loss (%)		Current		Portfolio
GUGGENHEIM TAXABLE MUNICIPAL BOND & INVEST MENT GRADE DEBT TRUST	1,000.00	24.19	24,85	24,192.26	24,850.00	657.74	2.72%	1,508.76		0.0000	0.85%
ZIONS BANCORP NA SER G RT 06.30% PREFERRED CLBL PAR VALUE - 25.00 USD	900,00	27.73	27,64	24,956.61	24,876,00	-80.61	-0.32%	1,417.50	5.70% 50.03%	50.03%	0.86%
Total Fixed Income				\$49,148.87	\$49,726.00	\$577.13	1.17%	\$2,926.26	5.88% 100,00%	00,00%	1.71%
- And I I WOULD				\$49,148,87	\$49,726.00	\$577.13	1.17%	\$2,926,26	5.88% 100.00%	0,00%	1.71%
Equity	Quantity	Purchase price (\$) / Avg Price	Price on 09/01/2021 (\$)	Cost basis (\$)	Market value (\$)	Unrealized Unrealized Gain/loss (\$) gain/loss (%)	Unrealized	3	Current		Portfolio
ABBVIE INC COM ALTRIA GROUP INC	400.00	77.13 39.33	112.27 50.08	30,852.66	44,908.00	14,055,34	45.56%	2,080.00		2.20%	1.54%
AKI ISAN PAKINERS ASSET MGMT INC ATRT INC	600,00	51.12	51,86	30,672.06	31,116.00	6,447.18 443.94	27.32%	2,160.00		1.47%	1.03%
BOEING COMPANY	1,540,00 150,00	32.40 341.30	27.19 218.12	49,900.85 51,194.71	41,872.60 32,718.00	-8,028.25 -18,476.71	-16.09% -36.09%				1.44%
					00000	-10,4/0,/1	-36.09%	0.00	0.00%	1.60%	1.13%



UBS Portfolio holdings - as of September 01, 2021 (continued)



Portfolio holdings - as of September 01, 2021 (continued)

70.11%	4.50% 18.58% 13.02% 3.87% 100.00% 70.11%	3.87%	\$17,037.91 \$78,823.68	-7.38% 13.95%	\$-30,153,10 \$249,613,62	\$2,038,637.97	\$408,840,19				Total International Total Equity
	0.04%	0.00%	0.00	-85.16%	-4,359.80	760.00	5,119.80	0.76	5.12	1,000.00	UCORE RAFE METALS INC CAD
	2.83%	1.88%	1,085.70	80.58%	25,731.94	57,624.00	37,892,06	82.32	45.56	700.30	SIEMENS A G SPON ADR
100	1.34%	8.95%	2,450.37	10.44%	2,583.76	27,390.00	24,800.24	18.26	16.53	1,500.00	SBERBANK SPON ADR
100	1.00%	6.60%	1,340,00	-13.14%	-3,070,48	20,290.00	23,360,48	20.29	23,36	1,000.00	POLYMETAL INTL PLC SPON ADR
	1.14%	2.24%	519.75	6.96%	1,507.12	23,162.50	21,655.38	92.55	86.62	250,00	NOVARTIS AG SPON ADR
40000	1.61%	5.57%	1,831.25	25.79%	6,742.89	32,890.00	26,147.11	32.89	26.15	1,000,00	ADR
8	0.66%	1.88%	252.00	36.39%	3,579.88	13,417.00	9,837.12	134.17	98.37	100,00	MEDTRONIC PLC
	1.20%	4.62%	1,130,00	-1.42%	-351.51	24,450,00	24,801.51	97.80	99.21	250,00	LYONDELLBASEIL INDUSTRIES N V
	0.12%	0.00%	3,00	-85.40%	-14,230.91	2,432.60	16,663.50	0.38	0.56	30,000.00	GREENLAND MINERALS & ENERGY
	1.10%	7.91%	1,773.72	7.69%	1,607.46	22,500.00	20,892.54	37.50	34.82	600.00	BRITISH AMER TOBACCO PLC GB SPON ADR
	3.61%	5.15%	3,794.13	-41.87%	-53,033.98	73,634.99	126,668.97	24.31	41.82	3,029,00	BP PLC SPON ADR
	1.63%	5.31%	1,760,00	14.40%	4,173.77	33,160.00	28,986,23	33.16	28.99	1,000.50	BANK OF N.T. BUTTERFIELD & SON LTD BMD
	2.30%	2.33%	1,093.00	-2.16%	-1,039.25	46,976.00	48,015.25	58.72	60.02	800.00	ASTRAZENECA PLC SPON ADR
											International
	1.46%	6.32%	\$1,882,32	25.32%	\$6,013,84	\$29,762.92	\$23,749,08				Total Global
1.02%	1.46%	6.32%	1,882.32	25.32%	6,013.84	29,762.92	23,749.08	29.41	23.4*	1,012,50	COHEN & STEERS INFRASTRUCTURE FUND INC Client investment: \$23,475.35 Reinvested dividends: \$273.73 (25.78%) Investment return: \$6,287.57 (25.78%)
		2.07 /2	and a factor of the second	20.70	\$413/134,00	# Canal Love and	4 Land Agentica				Global
56.07%	79 96%	3 670	450 003 A5	7001 00	¢773 752 99	¢1 630 187 06	\$1 3E6 A70 08				Total US
	% of % cf Equity Portfolio	Current yield (%)	Est. annual Current income (\$) yield (%)	Unrealized ain/loss (%)	Unrea ized Unrealized gain/loss (%)	Market value (\$)	Cost basis (\$)	Price on 09/01/2021 (\$)	Purchase price (\$) / Avg Price	Quantity	Equity



2021 (continued) urchase Price an ice (\$) / 05/01/2021 (\$) Cost basis (\$) Market value (\$) gain/l 26.27 25.89 26,269.01 25,890.00 74,7 11.07 13.40 354,086.03 428,800.00 74,7 \$380,355.04 \$454,690.00 \$74,3 Cost basis (\$) Market value (\$) gain/lo \$7588,055.04 \$454,690.00 \$74,3	100%	100%	3.07%	\$89,367,84 3,07%	12,56%	\$324,531,71	1/765/106/76	On't policies	Testagi i digensia di desarata di mangani di	0,00	t values): \$(local accrued interest (included in market values): \$0,00
Consolidated report prepared for The Charles and Marth The Charles and T	% cf	% of asset	Current rield (%)	Est. annual income (\$)	Unrealized ain/loss (%)	(Q)	Market value (\$)	Cost basis (\$)				Total Portfolio
BS Choldings - as of September 01, 2021 (continued) Purchase Price an price (\$) / 05/01/2021 Quantity Avg Price (\$) / 05/01/2021 Cost basis (\$) Market value (\$) gain/1 EXETF ANZGI INCOME & 32,000.30 11.07 13.40 354,086.03 428,800.00 74,7 IND A Bent \$196,093.87 (ividends: \$157,992.16 sturn: \$232,706.13 (118.67%) Ced \$380,355.04 \$454,690.00 574,3	15.64%	100,00%	1.67%	\$7,612,91	19.54%	574,334,96	\$454,690,00	\$380,355,04				
of September 01, 2021 (continued) Purchase Price an price (\$) / 05/01/2021 Quantity Avg Price (\$) / 05/01/2021 1,000.30 26.2? 25.89 26,269.01 25,890.00 -3 32,000.30 11.0? 13.40 354,086.03 428,800.00 74,7	15,64%	100,00%	1.67%	\$7,612,91	19,54%	574,334,96	\$454,690,00	\$380,355,04				Total Other
Sings - as of September 01, 2021 (continued) Purchase Price on Frice on Frice (\$) / 05/01/2021 (cost basis (\$) Market value (\$) Gain/1	14.75%	94.31%	1.41%	6,024.77	21.10%	74,713.97	428,800.00	354,086.03	13.40			GRO'NTH FUND A Client investment: \$196,093.87 Reinvested dividends: \$157,992.16 Investment eturn: \$232,706.13 (118.67%)
Sings - as of September 01, 2021 (continued) Purchase Price on Frice on Frice (\$), 05/01/2021 (cost basis (\$) Market value (\$) gain/1 (s)	0.89%	5,69%	6.13%		-1,04					44.07	UC 000 CE	VIRTUS ALLIANZGI INCOME &
JBS io holdings - as of September 01, 2021 (continued) Purchase Price on Price on Price (\$) / 05/01/2021 Quantity Avg Price (\$) Cost basis (\$) Market value (\$) gain/					1 1406	-37401	25,890.00	26,269.01	25.89	26.27	1,000.30	THE STRATEGY SHS NASDAQ 7 HANDLIND 3X ETF
	% c	% of Other	Current yield (%)	Est. annual income (\$)	Unrealized	Unrea ized	Market value (\$)	1-	Price on 05/01/2021 (\$)	Purchase price (\$) / Avg Price	Quantity	Other
	la Aaroi	and Marth	Charles	orepared for The	lidated report p	Consol		J)	(continued	01, 2021	tember (Portfolio holdings - as of Sep