One hundred specialists call for WHO to change its hostile stance on tobacco harm reduction – new letter to FCTC delegates published

written by Clive Bates | 18 October 2021

Just want the letter? PDF version: English, Français, Español, Deutsch (new) – and text below.

100 specialists in nicotine science, policy and practice have come together to call on the 182 parties (countries) to the Framework Convention on Tobacco Control to take a more positive stance on tobacco harm reduction. The letter pushes back against WHO's misguided and unscientific drive for prohibition or excessive regulation and taxation of vaping products, heated and smokeless tobacco products, and novel oral nicotine products, such as pouches.

From 8-13 November 2021, the ninth meeting of the Conference of the Parties of the Framework Convention on Tobacco Control (COP-9) will be held online. The meeting details are here.

The letter makes seven main points relevant to FCTC parties and then six recommendations. The letter text must speak for itself.

Several signatories have made statements on the letter, or on WHO's approach to tobacco harm reduction and innovation. These are set out here.

The letter text, references and signature list are included below in English (or in German here).

Heads of Delegation
Parties to the Framework Convention on Tobacco Control
Ninth Conference of the Parties, 8-13 November 2021

18 October 2021

Dear sir or madam

The urgent need to reduce deaths from smoked tobacco: parties should challenge WHO to modernise its approach to tobacco policy

We are independent experts in tobacco and nicotine science and policy. We write to urge Parties to the FCTC to encourage WHO to support and promote the inclusion of tobacco harm reduction into the Framework Convention on Tobacco Control.

Over the last decade, innovation in the tobacco and nicotine marketplace has meant there are now many nicotine products available that do not involve combustion of tobacco leaf and inhalation of smoke. These smoke-free products include vaping products, novel oral nicotine pouches, heated tobacco products, and low-nitrosamine smokeless tobacco, such as snus. Cigarettes and other smoked tobacco products are responsible for the vast majority of the deaths caused by tobacco use globally. Smoke-free nicotine products offer a promising route to reducing the harms arising from smoking. There is compelling evidence that smoke-free products are much less harmful than cigarettes and that they can displace smoking for individuals and at the population level.

We recognise there is uncertainty as to the benefits and risks associated with the evolving marketplace of non-combustible tobacco products over the longer

term, and we recognise there is a continuum of risk in these products. We are also duly cautious about the involvement of the tobacco industry. However, we must also consider the substantial body of evidence we do have and not allow excessive caution or residual uncertainties to deny smokers promising options to switch away from the combustible products that we know with certainty are lethal.

Regrettably, WHO has been dismissive of the potential to transform the tobacco market from high-risk to low-risk products.[1] WHO is rejecting a public health strategy that could avoid millions of smoking-related deaths. We invite you to consider the following seven points and then our recommendations.

1. Tobacco harm reduction presents significant public health opportunities

Fifteen past presidents of the leading professional academic society in the field, the Society for Research on Nicotine and Tobacco (SRNT), have written a scientific essay arguing for a rebalancing in tobacco policy to exploit opportunities from reduced-risk products. The authors, some of the most credible experts globally, address many misconceptions regarding risks to health, gateway effects, youth use, and addiction.[2] The paper concludes:

> *While evidence suggests that vaping is currently increasing smoking cessation, the impact could be much larger if the public health community paid serious attention to vaping's potential to help adult smokers, smokers received accurate information about the relative risks of vaping and smoking, and policies were designed with the potential effects on smokers in mind. That is not happening.*

It is not happening in WHO. That must change, if necessary, through the leadership of the Parties if WHO remains unwilling or unable to perform this role.

2. E-cigarettes are a driver of smoking cessation

Since COP8, evidence has continued to accumulate supporting the role that e-

cigarettes play in reducing smoking. In particular, the Cochrane Review, which provides a world-renowned synthesis of clinical trial evidence, concludes in September 2021:[3]

> *Nicotine e-cigarettes probably do help people to stop smoking for at least six months. They probably work better than nicotine replacement therapy and nicotine-free e-cigarettes. They may work better than no support, or behavioural support alone, and they may not be associated with serious unwanted effects.*

The trial evidence is supported by observational studies, population trends, market data and user testimony.[4] Taken as a whole, the evidence makes a compelling case that smoke-free alternatives to cigarettes displace smoking. The Tobacco Treatment Network of the SRNT recently argued:[5]

Strategies used for combustible product cessation may be adapted for novel products, and treatment recommendations for tobacco use disorder should be made within the context of a harm reduction framework wherein alternative product use may be the desired outcome.

3. Tobacco harm reduction can contribute to the Sustainable Development Goals

SDG target 3.4 aims to cut premature deaths from four key non-communicable diseases (NCDs) by one-third by 2030 compared to 2015.[6] Most of the world's nations are far behind the progress necessary to meet the goal.[7] The only way for tobacco control to make a substantial difference over this period is rapid smoking cessation.[8] The fastest acting tobacco control measures would mix the driving force of MPOWER measures with the offer of a more straightforward behavioural response for most smokers: switching from smoking to smoke-free products. Such an approach secures a major reduction in disease risk without the additional struggle of quitting nicotine use. Modelling the impact of smoke-free products on tobacco-related morbidity and mortality shows very substantial public health benefits.[9]

4. Major regulatory assessments and experience support heated tobacco products

Though heated tobacco products create greater exposures to toxicants than ENDS, pouches or smokeless tobacco, these products may be a more acceptable reduced-risk alternative to smoking for some smokers. The US Food and Drug Administration conducted an extensive evaluation of over two million pages of evidence for a heated tobacco product made by a major tobacco company. The FDA concluded the product is "appropriate for the protection of public health" and disclosing to the public that it created significantly lower human exposures to toxicants is "appropriate for the promotion of public health".[10] It is also clear that dramatic declines in smoking in Japan followed the introduction of heated tobacco products in 2015.[11] Market data shows an unprecedented decline of over 40 per cent in the volume of cigarettes and cigarillos sold in Japan between 2015 to 2020.[12] Yet, these significant findings are not acknowledged by WHO in its recent paper for COP9 on novel and emerging tobacco products. Disregarding the clear public health potential, WHO asserted:[13]

> *Regulators should not allow themselves to be distracted by tobacco and related industry tactics or the aggressive promotion of these products.*

Further, the Convention secretariat has argued, incorrectly, that heated tobacco product aerosol should be classified as "tobacco smoke".[14] Such an approach underplays the risks of combustion products and inappropriately blurs the critical distinction between smoked and smoke-free products. FCTC parties should not be distracted from the significant public health potential of reduced-risk products simply because tobacco companies make them. Harm reduction approaches inevitably involve products made by commercial entities making consumer nicotine products in competition with cigarettes. The challenge for regulators is to align industry incentives with public health imperatives to reduce harm, an approach known as risk-proportionate regulation.

5. Policymakers must recognise unintended consequences of policy proposals

WHO continues to advocate for prohibitions of low-risk alternatives to smoking and applaud those countries that ban these products. For example, Dr Harsh Vardhan, India's Health and Family Welfare Minister, was awarded the WHO Director-General's Special Recognition Award, with the following citation: [15]

> *Dr Harsh Vardhan received the award for spearheading the Government of India's legislation to ban e-cigarettes and heated tobacco products in 2019.*

However, policymakers must consider the likely or plausible real-world effect of such bans. What effect will it have on India's 100 million smokers who are now denied safer alternatives? Would it mean young people take up smoking instead of ENDS use? Would it create significant illicit trade? Would it mainly serve the interests of India's partially state-owned cigarette industry? More generally, the Royal College of Physicians (London) set out the challenge of unintended consequences in its 2016 report:[16]

> *However, if [a risk-averse, precautionary] approach also makes e-cigarettes less easily accessible, less palatable or acceptable, more expensive, less consumer friendly or pharmacologically less effective, or inhibits innovation and development of new and improved products, then it causes harm by perpetuating smoking. Getting this balance right is difficult.*

In papers for the Conference of the Parties, the WHO routinely advocates for outright prohibitions of smoke-free alternatives to cigarettes or regulation and taxation of smoke-free products equivalent to cigarettes. Neither is appropriate for public health. The danger of this approach is that it forms a de facto regulatory protection of the cigarette trade and will, to quote the Royal College, cause harm by perpetuating smoking. Evidence is emerging that ENDS use displaces smoking[17] [18] [19] and that measures to control ENDS use can trigger increases in smoking. For example, evidence suggests e-liquid flavour bans,[20] raising taxes on vaping products,[21] [22] e-cigarette advertising bans,[23] and access restrictions[24] may increase cigarette smoking. Excessive regulation of smoke-free alternatives will also unfairly favour the

larger companies that make these products, namely the tobacco companies. This is not a call for an unregulated market but for carefully designed risk-proportionate regulation that is mindful of the risks of harmful unintended consequences.

6. Place adolescent ENDS use in proper context.

Policymakers are rightly concerned about increases in youth ENDS use, notably in the United States. However, a deeper analysis of the US evidence, segmenting data by frequency of use and prior tobacco use, is revealing and reassuring. It shows that: (1) most adolescent vaping is infrequent, (2) that frequent use and nicotine dependence among tobacco-naïve users is rare, and (3) most frequent use is concentrated in those who have previously used tobacco.[25] [26] Despite the rise in adolescent e-cigarette use, there has not been an increase in nicotine dependence. [27] The United States has seen an abnormally rapid decline in teenage smoking coinciding with the uptake of vaping.[28] [29] Some young people use ENDS to quit cigarette smoking or as an alternative to cigarettes. As a result, vaping is displacing cigarette smoking among young people and established smokers.[17] [18] Though there are positive associations between adolescent ENDS use and subsequent smoking, these are unlikely to indicate a 'gateway effect'. They are more likely to arise from common risk factors – risk-taking characteristics of the individual or their circumstances that incline them to both smoking and ENDS use.[30] [31] [32] [33]

7. There is public health support for harm reduction in tobacco control

Harm reduction is practised in many areas of public health (illicit drugs, sexual health, HIV), and the Framework Convention on Tobacco Control (Article 1d) also acknowledges harm reduction as a component of tobacco control. For hundreds of millions of people who struggle to quit smoking or want to continue to use nicotine, these products represent a significant additional pathway to escape from the deadliest ways to use nicotine. Smoking accounts for 98 per cent of the global burden of tobacco-related mortality.[34] [35] Much of WHO's rhetoric frames tobacco harm reduction as an industry strategy to undermine tobacco control. But this ignores substantial expert support for tobacco harm

reduction in public health and tobacco control[36] and the experience of millions of smokers who have successfully switched and are better off physically, socially, and economically.[37]

Our recommendations

We recommend that Parties to the FCTC take a more questioning and assertive approach to WHO's advocacy on smoke-free alternative to smoking and undertake the following:

- *Make tobacco harm reduction a component of the global strategy to meet the Sustainable Development Goals for health, notably SDG 3.4 on non-communicable diseases.*
- *Insist that any WHO policy analysis makes a proper assessment of benefits to smokers or would-be smokers, including adolescents, as well as risks to users and non-users of these products.*
- *Require any policy proposals, particularly prohibitions, to reflect the risks of unintended consequences, including potential increases in smoking and other adverse responses.*
- *Properly apply Article 5.3 of the FCTC to address genuine tobacco industry malpractice, but not to create a counterproductive barrier to reduced-risk products that have public health benefits or to prevent critical assessment of industry data strictly on its scientific merits.*
- *Make the FCTC negotiations more open to stakeholders with harm-reduction perspectives, including consumers, public health experts, and some businesses with significant specialised knowledge not held within the traditional tobacco control community.*
- *Initiate an independent review of WHO and the FCTC approach to tobacco policy in the context of the SDGs. Such a review could address the interpretation and use of science, the quality of policy advice, stakeholder engagement, and accountability and governance. The Independent Panel for Pandemic Preparedness and Response (IPPPR), initiated to evaluate the response to the COVID-19 pandemic, offers such a model.[38]*

We believe that it is time for global tobacco policy to draw on the full potential of tobacco harm reduction. We hope the public health science, policy, and practitioner communities will converge on a common purpose to meet the SDGs

and to reduce the global burden of tobacco-related disease and premature mortality as quickly and deeply as possible.

We will share this letter with relevant stakeholders.

The signatories to this letter report no conflicts of interest with respect to the tobacco industry and no issues arising under Article 5.3 of the Framework Convention on Tobacco Control.

Yours sincerely

[100 signatures – see below]

References

[1] See, for example: WHO press release for World No Tobacco Day 2021, 19 May 2021 [link]; WHO report on the global tobacco epidemic 2021: addressing new and emerging products, 17 August 2021 [link]; and WHO Q&A on e-cigarettes 29 January 2020 [link]

[2] Balfour DJK, Benowitz NL, Colby SM, Warner KE et al. Balancing Consideration of the Risks and Benefits of E-Cigarettes. Am J Public Health 2021;e1–e12. [link][full text PDF]

[3] Hartmann-Boyce J, McRobbie H, Butler AR, Lindson N, Bullen C, Begh R, et al. Electronic cigarettes for smoking cessation. Cochrane Database Syst Rev. September 2021 update. [link]

[4] The evidence is briefly summarised in: Balfour DJK, Benowitz NL, Colby SM, Warner KE et al. Balancing Consideration of the Risks and Benefits of E-Cigarettes. Am J Public Health 2021;e1–e12. [link]

[5] Palmer AM, Toll BA, Carpenter MJ, et al. Reappraising Choice in Addiction: Novel Conceptualizations and Treatments for Tobacco Use Disorder. Nicotine Tob Res 2021 [link]

[6] By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being [compared to 2015] [link]

[7] Bennett JE, Kontis V, Mathers CD, et al. NCD Countdown 2030: pathways to achieving Sustainable Development Goal target 3.4. Lancet 2020;396(10255):918–934. [link] See commentary: NCD Alliance, New NCD Countdown 2030 report shows slow progress towards UN SDG target 3.4, 4 September 2020 [link]

[8] Jha P, Peto R. Global Effects of Smoking, of Quitting, and of Taxing Tobacco. N Engl J Med 2014;370(1):60–68. [link]

[9] See, for example: Mendez D, Warner KE. A Magic Bullet? The Potential Impact of E-Cigarettes on the Toll of Cigarette Smoking. Nicotine Tob Res 2020; [link] and Levy DT, Borland R, Lindblom EN, et al. Potential deaths averted in USA by replacing cigarettes with e-cigarettes. Tob Control 2018;27(1):18–25. [link]

[10] See FDA, Pre-Market Tobacco Marketing Orders, iQOS System Holder and Charger, and Heatsticks, 30 April 2019 [link] and FDA, Modified Risk Orders, iQOS System Holder and Charger, and Heatsticks, 7 July 2020 [link]

[11] Cummings KM, Nahhas GJ, Sweanor DT. What Is Accounting for the Rapid Decline in Cigarette Sales in Japan? Int J Environ Res Public Health 2020;17(10):3570. [link]

[12] Philip Morris International, Can innovative products like IQOS accelerate the decline of smoking? A case study from PMI's Integrated Report 2020. 18 May 2021 [link]

[13] WHO FCTC/COP/9/9 Comprehensive report on research and evidence on novel and emerging tobacco products, in particular heated tobacco products, in response to paragraphs 2(a)–(d) of decision FCTC/COP8(22) 21 July 2021 [link]

[14] FCTC Convention Secretariat, Challenges posed by and classification of novel and emerging tobacco products, FCTC/COP/9/10, July 2021 [link]

[15] WHO press release: Dr Harsh Vardhan conferred WHO award for leadership in tobacco control. 2 June 2021 [link]

[16] Royal College of Physicians. Nicotine without smoke: tobacco harm reduction. London: RCP; 2016. [link] (12.10 p.187)

[17] Selya AS, Foxon F. Trends in electronic cigarette use and conventional smoking: quantifying a possible 'diversion' effect among US adolescents. Addiction. 2021;add.15385. [link]

[18] Sokol N, Feldman J. High school seniors who used e-cigarettes may have otherwise been cigarette smokers: evidence from Monitoring the Future (United States, 2009-2018). Nicotine Tob Res. 2021 [link]

[19] Farsalinos KE, Poulas K, Voudris V, Le Houezec J. E-cigarette use in the European Union: millions of smokers claim e-cigarettes helped them quit [Internet]. Vol. 112, Addiction. Blackwell Publishing Ltd; 2017. p. 545–6. [link]

[20] Friedman AS. A Difference-in-Differences Analysis of Youth Smoking and a Ban on Sales of Flavored Tobacco Products in San Francisco, California. JAMA Pediatr 2021 [link]

[21] Abouk R, Courtemanche C, Feng B, et al. Intended and Unintended Effects of E-cigarette Taxes on Youth Tobacco Use. San Diego State University Center for Health Economics and Policy Studies, Working Paper 2021801: 2021. [link]

[22] Pesko MF, Courtemanche CJ, Maclean JC. The effects of traditional cigarette and e-cigarette tax rates on adult tobacco product use. J Risk Uncertain. 2020;60(3):229–58. [link]

[23] Dave D, Dench D, Grossman M, Kenkel DS, Saffer H. Does e-cigarette advertising encourage adult smokers to quit? J Health Econ. 2019; 68:102227. [link]

[24] Pesko MF, Hughes JM, Faisal FS. The influence of electronic cigarette age purchasing restrictions on adolescent tobacco and marijuana use. Prev Med. 2016;87:207–212. [link]

[25] Jarvis M, Jackson S, West R, Brown J. Epidemic of youth nicotine addiction? What does the National Youth Tobacco Survey 2017-2019 reveal about high school e-cigarette use in the USA? Qeios. 2020. [link]

[26] Glasser AM, Johnson AL, Niaura RS, Abrams DB, Pearson JL. Youth Vaping and Tobacco Use in Context in the United States: Results from the 2018 National Youth Tobacco Survey. Nicotine Tob Res [Internet]. 2021 Feb 16 [cited 2021 Sep 7];23(3):447–53. [link]

[27] Jackson SE, Brown J, Jarvis MJ. Dependence on nicotine in US high school students in the context of changing patterns of tobacco product use. Addiction. 2021;116(7):1859–70. [link]

[28] Levy DT, Warner KE, Michael Cummings K, Hammond D, Kuo C, Fong GT, et al. Examining the relationship of vaping to smoking initiation among US youth and young adults: A reality check. Tob Control. 2019;28(6):629–35. [link]

[29] Meza R, Jimenez-Mendoza E, Levy DT. Trends in Tobacco Use Among Adolescents by Grade, Sex, and Race, 1991-2019. JAMA Netw Open [Internet]. 2020 Dec 1 [cited 2021 Sep 19];3(12):e2027465–e2027465. [link]

[30] Chan GCK, Stjepanović D, Lim C, Sun T, Shanmuga Anandan A, Connor JP, et al. Gateway or common liability? A systematic review and meta-analysis of studies of adolescent e-cigarette use and future smoking initiation . Addiction. 202;add.15246. [link]

[31] Hall W, Chan G. The "gateway" effect of e-cigarettes may be explained by a genetic liability to risk-taking. PLOS Med. 2021;18(3):e1003554. [link]

[32] Kim S, Selya AS. The Relationship Between Electronic Cigarette Use and Conventional Cigarette Smoking Is Largely Attributable to Shared Risk Factors. Nicotine Tob Res. 2020;22(7):1123–30. [link]

[33] Lee PN, Coombs KJ, Afolalu EF. Considerations related to vaping as a possible gateway into cigarette smoking: an analytical review. F1000Research. Version 3, July 2019. [link]

[34] Stanaway JD, Afshin A, Gakidou E, et al. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet 2018;392(10159):1923–1994. [link]

[35] Kozlowski LT. Policy Makers and Consumers Should Prioritize Human Rights to Being Smoke-Free over Either Tobacco- or Nicotine-Free: Accurate Terms and Relevant Evidence [Internet]. Nicotine Tob. Res. 2020;22(6):1056–1058. [link]

[36] See, for example, Letter to WHO Director General from 72 independent experts in tobacco and nicotine policy, 1 October 2018 [link], and Comments on vaping and tobacco harm reduction from expert stakeholders, 31 May 2021 [link].

[37] See, for example, 14,000+ testimonials at Right to Vape [link]

[38] WHO, Independent evaluation of global COVID-19 response announced, 9 July 2020 [link]

Signed by the following:

For full titles and affiliation, please see the PDF version: English, Français, Español

1. *Manuel Linares Abad, PhD*
2. *David B. Abrams, PhD*
3. *Karolien Adriaens, PhD*
4. *Jasjit S Ahluwalia, MD, MPH, MS*
5. *Sanjay Agrawal, MD, MBChB*
6. *Philippe Arvers, MD, PhD*
7. *Frank Baeyens, PhD*
8. *Scott D. Ballin, JD*
9. *José Mª García Basterrechea, MD*
10. *Clive Bates, MA, MSc*
11. *Robert Beaglehole, MD, DSc, FRSNZ*
12. *Pavel Bém MD*
13. *Ruth Bonita MPH PhD MD (hon)*
14. *Ron Borland, PhD*

15. *John Britton, MD*
16. *Fernando Fernández Bueno, MD*
17. *Suzamme Colby, PhD*
18. *Sharon Cox, PhD*
19. *Kenneth Michael Cummings, PhD*
20. *Andrew DaRoza*
21. *Lynne Dawkins, PhD*
22. *Clifford E. Douglas, JD*
23. *Hugo Caballero Durán, MD*
24. *Allan C. Erickson*
25. *Carmen Escrig, PhD*
26. *Jean-François Etter, PhD*
27. *Patrick Fafard, PhD*
28. *Konstantinos Farsalinos, MD, MPH*
29. *Jonathan Foulds, PhD*
30. *Abigail S. Friedman, PhD*
31. *Thomas J. Glynn, PhD*
32. *Eliana Golberstein*
33. *Ernest Groman*
34. *Miguel de la Guardia PhD*
35. *Peter Hajek, PhD*
36. *Wayne Hall, PhD*
37. *Deborah Hart LLB*
38. *Cheryl Healton, MPA, DrPH*
39. *Christian Heinrich Henonin MD*
40. *Natasha A. Herrera*
41. *Maria del Mar Sangüesa Jareño, MD*
42. *Martin J Jarvis, DSc OBE*
43. *Martin Juneau , MPs, MD, FRCPC*
44. *Aparajeet Kar, MD*
45. *Imane Kendili*
46. *Milton Klun*
47. *Dr. Tan Kok Kuan, MD*
48. *Lynn T. Kozlowski, PhD*
49. *Eva Králíková, MD*
50. *George Laking, MD, PhD*
51. *Jacques Le Houezec, PhD*

52. *Karl E Lund, PhD*
53. *Clifford Garfield Mahood, O.C.*
54. *Bernhard-Michael Mayer, PhD*
55. *Olivia Maynard, PhD*
56. *Garrett McGovern, MD*
57. *Kiran Melkote, MBBS, MS*
58. *Colin Mendelsohn, MB BS*
59. *Robin Mermelstein, PhD*
60. *Faares Mili, MD*
61. *Tom Miller*
62. *Marcus Munafò, PhD*
63. *José David García Muñiz, MD, PhD*
64. *Ethan Nadelmann, PhD, JD*
65. *Raymond Niaura, PhD*
66. *Caitlin Notley, PhD*
67. *David Nutt, DM, FRCP, FRCPsych, FMedSci, DLaws*
68. *Tikki Elka Pang, PhD*
69. *Young-bum Park, PhD*
70. *César Paz y Miño, MD, PhD*
71. *Michael Pesko, PhD*
72. *Hernán Prat, MD, PhD*
73. *Lars M. Ramström, PhD*
74. *Vaughan Rees, PhD*
75. *Arleen R. Reyes, DMD, ICD, ICCDE*
76. *Steven A. Schroeder, MD*
77. *John R. Seffrin , PhD*
78. *Peter Selby MBBS, CCFP, FCFP, MHSc, dipABAM, DFASAM*
79. *Rohan Sequeira*
80. *Lion Shahab, PhD*
81. *Michael Siegel, MD, MPH*
82. *Antonio Sierra, MD, PhD*
83. *Francisco Garcia Sierra, MD*
84. *Ron Christian G. Sison, MLS(ASCPi), MPH*
85. *Andrzej Sobczak, PhD*
86. *Roberto A Sussman, PhD*
87. *David Sweanor, JD*
88. *Enrique Teran, MD, PhD*

89. *Umberto Tirelli MD*
90. *Josep María Ramón Torrell, MD, PhD*
91. *Mark Tyndall MD ScD FRCPC*
92. *Angel González Ureña, PhD*
93. *Francisco E. Urrestra. MD.*
94. *Diego Verrastro MD*
95. *Natalie Walker, PhD*
96. *Kenneth Warner, PhD*
97. *Judith Watt*
98. *Robert West PhD*
99. *Alex Wodak AM FRACP, FAChAM*
100. *Naohito Yamaguchi, MD*