

Latvia's Candidate for Vice-Chair
Intergovernmental Panel on Climate Change (IPCC) Working Group II

Curriculum Vitae

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PROFILE

Zinta Zommers is the lead for climate science at the United Nations Office for the Coordination of Humanitarian Affairs, where she works to reduce the impacts of climate shocks on vulnerable communities. She has a unique policy and practitioner perspective, gained from two decades of experience conducting research and implementing disaster risk reduction and humanitarian programs in Africa and Asia. She is a specialist in climate risk, impacts and adaptation, and also has a research background in conservation and environmental change, and health. Zinta has held a variety of roles with the UN, including as part of the UN Secretary General's Climate Change Team in New York, with UNEP Chief Scientist's Office in Nairobi, the UN Office for Disaster Risk Reduction in Bonn and the Food and Agriculture Organization in Sierra Leone. She has actively contributed to the IPCC, as a lead author, review editor, and scientific steering committee member, working closely with all IPCC Working Groups. Zinta has authored and edited two books on climate change adaptation and early warning systems, over 20 peer reviewed academic journal articles and numerous book chapters and articles in the media. Academic accolades include a PhD degree at the University of Oxford, a Rhodes Scholarship and a Commonwealth Scholarship at the University of Oxford, and a Visiting Fellowship at Perry World House, University of Pennsylvania.

IPCC CONTRIBUTIONS

Zinta contributed significantly to the IPCC's 6th Assessment Cycle as:

Lead Author for Chapter 7 "Risk management and decision making in relation to sustainable development", *IPCC Special Report on Climate Change and Land*.

Core Writing Team Member for the *AR6 Synthesis Report: Climate Change 2023*.

Author, Summary for Policy Makers, *AR6 Synthesis Report: Climate Change 2023* and *Special Report on Climate Change and Land*.

Review Editor, Chapter 17 "Decision-Making Options for Managing Risk", Working Group II Assessment Report, *Climate Change 2022: Impacts, Adaptation and Vulnerability*

Reviewer for numerous IPCC AR6 and AR5 reports

Scientific Steering Committee member for the IPCC Workshop on the Use of Scenarios in the Sixth Assessment Report and Subsequent Assessments

Zinta has worked to strengthen IPCC assessment protocols, for example by improving the robustness of risk assessments, then compiling and publishing methodological innovations in a peer-reviewed scientific paper.

EDUCATION, FELLOWSHIPS AND SELECTED AWARDS

- 2021- 2023 **Visiting Fellow** – Perry World House, University of Pennsylvania
- 2011 - 2012 **Junior Research Fellow in Environmental Change and Conservation** – Lady Margaret Hall, University of Oxford
- 2005 - 2011 **D.Phil (PhD) in Zoology** - Wildlife Conservation Research Unit, University of Oxford
- 2003 - 2005 **M.Phil in Development Studies** - University of Oxford
- 2005 **Commonwealth Scholarship** - University of Oxford
- 2003 **Rhodes Scholarship** - University of Oxford
- 2003 **Douglas Pimlott Graduate Award** - Environmental Studies Program, University of Toronto
- 2002 **Chancellor's Scholarship** – University of Toronto
- 1998 - 2003 **Honors Bachelor of Science Degree** - University of Toronto, Trinity College

PROFESSIONAL EXPERIENCE

- 2020 - 2023 **United Nations Office for the Coordination of Humanitarian Affairs (OCHA)**
Leading climate science and practice work for OCHA, including work to pilot anticipatory action frameworks for climate shocks in the Philippines and South Sudan.
- 2019 - 2021 **United Nations Office for Disaster Risk Reduction (UNDRR)**
Managed programs related to Disaster Loss and Risk Databases and Sendai Framework Monitor, and managed policy development on issues related to climate change adaptation and climate related losses and damages.
- 2018 - 2019 **Mercy Corps Europe**
Lead advocacy for the Zurich Flood Resilience Alliance, a coalition of seven private sector, research and non-governmental organizations. Identified flood risks, developed activities to address these, managed research in four countries, including on the development innovative climate finance products.
- 2017 - 2018 **Food and Agriculture Organization (FAO)**
Supported the Strategic Advisory Unit of the Sierra Leone Ministry of Agriculture, Forestry & Food Security (MAFFS), as part of the FIRST Program (Food and Nutrition Security Impact, Resilience, Sustainability and Transformation). Helped lead the UN humanitarian response during the 2017 flood and landslide in Freetown by producing the first disaster loss assessment and presenting the results to the President and Cabinet.
- 2016 - 2017 **United States Agency for International Development (USAID)**
On leave from the UN, worked with the Food for Peace Program in the Bureau for Democracy, Conflict and Humanitarian Assistance, USAID. Provided technical expertise on resilience, risk management and climate change adaptation to food security projects and contributed to the development of policy.
- 2015 - 2016 **Executive Office of the UN Secretary-General (EOSG)**
Member of the Secretary-General's Climate Change Support Team, designed a global climate resilience initiative, part of the Secretary-General's overall strategy for climate change.
- 2012 - 2016 **United Nations Environment Programme (UNEP)**
Assessed the political and technical feasibility of establishing a global decadal climate change early warning system, and then managed a multi-year initiative to improve delivery of hazard warnings to vulnerable rural communities in Africa. Edited and managed the

publication of Global Environment Alerts, distributed monthly to 300,000 readers, including 1,000 policy makers on topics such as the adaptation gap.

OTHER PROFESSIONAL EXPERIENCE

- 2020 -2023 **Lecturer – University of Toronto, Faculty of Medicine**
Guest lecture on “Environmental and Health”, post-graduate education programme, and Mohammad and Zeynab Asadi- Lari Lecture, Global Health and Environment Programme.
- 2019 - 2020 **Guest Editor – *Sustainability and Current Opinion in Environmental Sustainability***
Guest editor of special issues in two academic journals on the topic of "Vulnerability Assessment and Disaster Risk Reduction" and “Slow Onset Climate Hazards”
- 2018 - 2019 **Member of the Expert Advisory Group - Centre for Disaster Protection**
Contributed to the establishment of this flagship technical assistance programme, which aims to help countries strengthen planning and financial arrangements to respond to disasters, safeguard economic development and protect poor households.
- 2005 - 2007 **Coordinating Lead Author – Fourth Global Environment Outlook Report (GEO-4), United Nations Environment Programme**
Coordinated research and writing of Chapter 1, “Environment and Development”, in UNEP’s primary state of the environment report, assisted the negotiation of the final text of the summary for decision makers. Participated in GEO-4 media launch in London, communicating key policy messages and advocating for sustainable management of natural resources on Al Jazeera and BBC Radio.
- 2005 - 2010 **Lecturer - University of Oxford**
Taught undergraduates at the Institute of Human Sciences and the Department of Zoology.

SELECTED PUBLICATIONS

Books and Book Chapters

- Zommers, Z. and Alverson, K. (Eds) (2018). *Resilience: The Science of Adaptation to Climate Change*. Waltham, MA: Elsevier Inc.
- Zommers, Z. and Singh, A. (Eds) (2014). *Reducing Disasters: Early Warning Systems for Climate Change*. New York: Springer.
- Van der Geest, K., Sherbinin, A., Kienberger, S., Zommers, Z., Sitati, A., Roberts, E., and James, R. (2019). *The Impacts of Climate Change on Ecosystem Services and Resulting Losses and Damages to People and Society*. In Loss and Damage from Climate Change: Concepts, Methods and Policy Options. Mechler, R., Bouwer, L., Schinko, T., Surminski, S., and Linnerooth-Bayer, J. (Eds). Switzerland: Springer.
- Zommers, Z., Lombroso, D., Cowell, R., Sitati, A. and Vogel, E. (2017). *Early Warning Systems for Disaster Risk Reduction Including Climate Change Adaptation*. In The Routledge Handbook of Disaster Risk Reduction Including Climate Change Adaptation. Kelman, I., Mercer, J. and Gaillard, J. (Eds). London: Taylor and Francis.

Journal Articles

- Tkaczynski, P. et al. (2023) Shared community effects and the non-genetic maternal environment shape cortisol levels in wild chimpanzees. *Communications Biology*. (In press)

- Chaves-Gonzalez J, Milano L, Omtzigt D-J, Pfister D, Poirier J, Pople A, Wittig J and Zommers Z. (2022) Anticipatory action: Lessons for the future. *Front. Clim*, 4:932336. doi: 10.3389/fclim.2022.932336
- Berrang-Ford, L. et al. (2021). A systematic global stocktake of evidence on human adaptation to climate change. *Nature Climate Change*, 11, 989-1000.
- Magnan, A., Portner, H-O, Duvat, V., Garschagen, M., Guinder, V., Zommers, Z., Hoegh-Guldber, O., Gattuso, J-P. (2021) Estimating the global risk of antropogenic climate change. *Nature Climate Change*, 11, 879-885.
- Sitati, A., Joe, E., Pentz, B., Grayson, C., Jaime, C., Gilmore, E., Galappaththi, E., Hudson, A., Nagle Alverio, G., Mach, K., van Aalst, M., Simpson, N., Nanya Schwerdtle, P., Templeman, S., Zommers, Z., Ajibade, I, L.S. Safae Chalkasra, Umunay, P., Togola, I., Khousam, A., Scarpa, G., Coughlan de Perez, E. (2021) Climate change adaptation in conflict-affected countries: A systematic assessment of evidence. *Sustainability*, 2, 42, doi.org/10.1007/s43621-021-00052-9.
- Warner, K., Zommers, Z., Wreford, A. 2020. The real economic dimensions of climate change. *Journal of Extreme Events*, 7 (3) doi:10.1142/S2345737621310011.
- Zommers, Z., Marbaix, P., Fischlin, A., Ibrahim, Z., Grant, S., Magnan, A., Pörtner, H.O., Howden, M., Calvin, K., Warner, K., Thiery, W., Sebesvari, Z., Davin, E., Evans, J., Rosenzweig, C, O'Neill, B., Patwardhan, A., Warren, R., van Aalst, M., Hulbert, M. (2020) Burning Embers: Towards more transparent and robust climate change risk assessments. *Nature Reviews Earth and Environment*. doi:10.1038/s43017-020-0088-0
- Viner, D., Ekstrom, M., Hulbert, M., Warner, K., Wreford, A., Zommers, Z. (2020) Understanding the dynamic nature of risk in climate change assessments—A new starting point for discussion. *Atmos. Sci. Lett.* doi:10.1002/asl.958
- Dilling, L., Prakash, A., Zommers, Z., Ahmad, F., Singh, N., de Wit, S., Nalau, J., Daly, M., Bowman, K. (2019) Is Adaptation Success a Flawed Concept? *Nature Climate Change*, 9, 570-574.
- Warner, K., Zommers, Z., Wreford, A., Hulbert, M., Viner, D., Scantlan, J., Halsey, K., Halsey, K., Tamang, C. (2019) Characteristics of Transformational Adaptation in Climate-Land-Society Interactions. *Sustainability*, 11, 356; doi:10.3390/su11020356.
- Sonnweber, R., Araya-Ajoy, Y.G., Behringer, V., Deschner, T., Tkaczynski, P., Fedurek, P., Preis, A., Samuni, L., Zommers, Z., Gomes, C., Zuberbühler, K., Wittig, R., Crockford, C. (2018) Circadian Rhythms of Urinary Cortisol Levels Vary Between Individuals in Wild Male Chimpanzees: A Reaction Norm Approach. *Frontiers in Ecology and Evolution*, doi: 10.3389/fevo.2018.00085
- Baudoin, M., Henly-Shepard, S., Fernando, N., Sitati, A., Zommers, Z. (2016) From Top-Down to 'Community-Centric' Approaches to Early Warning Systems: Exploring Pathways to Improve Disaster Risk Reduction Through Community Participation. *Int. J Disaster Risk Science*, doi 10.1007/s13753-016-0085-6.
- Moyes, C., Henry, A., Golding, N., Huang, Z., Singh, B., Baird, J.K., Newton, P., Duda, K., Anstey, N., Elyazar, I., Chen, Q., Zommers, Z., Bhatt, S., Gething, P. Spatial & Hay, I. (2014) Defining the Geographical Range of the Plasmodium knowlesi Reservoir. *PLoS NTD*, DOI: 10.1371/journal.pntd.0002780.
- Baker SE, Cain R, van Kesteren F, Zommers ZA, D'Cruze N, Macdonald DW. (2013) Rough Trade: Animal Welfare in the Global Wildlife Trade. *Bioscience*, 63 (12): 928-938.
- Zommers, Z., Macdonald, D., Johnson, P. & Gillespie, T. (2013) Impact of human activities on chimpanzee ground use and parasitism (Pan troglodytes). *Conservation Letters*, doi: 10.1111/j.1755-263X.2012.00288.x

Zommers, Z., Johnson, P., & Macdonald, D. (2012). Biofuels bonanza? Sugarcane production and poverty in villages surrounding Budongo Forest. *Journal of Eastern African Studies*, 6:2, 177-195.

Zommers, Z. & Macdonald, D. (2012). Protected areas as frontiers for migration. *Conservation Biology*, 26:3, 547-556.

Wevers, D., Metzger, S., Babweteera, F., Bieberbach, M., Boesch, C., Cameron, K., Couacy-Hymann, C., Cranfield, M., Gray, M., Harris, L., Head, J., Jeffery, K., Knauf, S., Lankester, F., Leendertz, S., Lonsdorf, E., Mugisha, L., Nitsche, A., Reed, P., Robbins, M., Travis, D., Zommers, Z., Leendertz, F. & Ehlers, B. (2011). Novel adenoviruses in wild primates: a high level of genetic diversity and evidence of zoonotic transmissions *J. Virol.* 85 (20): 10774-1078.

Langergraber, K., Schubert, G., Carolyn, R., Wrangham, R., Zommers, Z. & Vigilant, L. (2011). Genetic differentiation and the evolution of cooperation in chimpanzees and humans. *Proceedings of the Royal Society B*, doi:10.1098/rspb.2010.2592.

Kaiser, M., Lowa, A., Ulrich, M., Ellerbrok, H., Goeffe, A., Blasse, A., Zommers, Z., Couarcy-Hymann, E., Babweteera, F., Zuberbuhler, K., Metzger, S., Geidel, S., Boesch, C., Gillespie, T. & Leendertz, F. (2010). Wild chimpanzees are infected with 5 *Plasmodium* species. *Emerging Infectious Diseases*, 16 (12), 1956 -1959.

Articles in the Media

Zommers, Z., Harootunian, G., Roberts, E., van der Geest, K., Sitati, A., Huq, S., de Sherbinin, A., and Kruczkiewicz, A. "Fort McMurray Fire, Keeping up the Political Heat on Loss and Damage," *Sustainability Executive Perspective, Thomson Reuters*, 19 May, 2016.

Zommers, Z. and McGlade, J. "Sea-level Loss and Damage: When Adaption is not Enough," *The Knowledge Effect, Thomson Reuters*, September 3, 2014.

Zommers, Z. "Latest strategy to fight global warming and the criminals taking advantage of it", *Dallas Morning News*, June 7, 2013.

Zommers, Z. "Global forest protection plan depends on carbon credits," *The Globe and Mail*, April 2, 2013.

Zommers, Z. "Predicting future climate change may lie in the past", *The Globe and Mail*, March 21, 2013.

Reports

Hurlbert, M. & Krishnaswamy, E. Davin, F.X. Johnson, C.F. Mena, J. Morton, S. Myeong, D. Viner, K. Warner, A. Wreford, S. Zakieldeen, Zommers, Z. Climate Change and Land: Risk management and decision-making in relation to sustainable development. *IPCC Spec. Rep.* (2019).

IPCC. IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems. *Summ. Policymakers Approv. Draft* (2019). doi:10.4337/9781784710644

United Nations Environment Programme. (2016). *Loss and Damage: The Role of Ecosystem Services*. Nairobi: Division of Early Warning and Assessment, United Nations Environment Programme.

United Nations Environment Programme. (2015). *Early Warning as a Human Right: Building Resilience to Climate Related Hazards*. Nairobi: Division of Early Warning and Assessment, United Nations Environment Programme.

United Nations Environment Programme. (2007). *Fourth Global Environment Outlook Report*. Nairobi: Division of Early Warning and Assessment, United Nations Environment Programme.