

INSTITUTO COSTARRICENSE DE ACUEDUCTOS Y ALCANTARILLADOS San José, Costa Rica Apartado 1097-1200. Teléfono 2242-5474. kramirez@aya.go.cr

MEMORANDO ACU

PARA: Oscar Izquierdo Sandí

Cooperación y Asuntos Internacionales

DE:

Kattya Ramírez Barrera

Dirección Jurídica/

20 de julio del 2018

ASUNTO: Coloquio derecho ambiental UICN

Para los efectos que corresponda, me permito adjuntar Informe de Viaje al Exterior, realizado del 4 al 6 de Julio 2018, denominado "The transformation of Environmental Law and Governance: Innovation, Risk and Resilience", en el cuál participó la suscrita.

C: Rodolfo Lizano Rojas, Dirección Jurídica Archivo





INSTITUTO COSTARRICENSE DE ACUEDUCTOS Y ALCANTARILLADOS

DEPENDENCIA: DIRECCION JURIDICA

INFORME DE VIAJE AL EXTERIOR DEL 4 AL 6 DE JULIO DEL 2018

"The transformation of Environmental Law and Governance: Innovation, Risk and Resilience"

fecha: 19 de Julio de 2018

TABLA DE CONTENIDOS

1. Ficha informativa:

País y ciudad visitado: Escocia- Glasgow

Fecha de la visita: 2 al 7 de Julio 2018

Funcionario(s) de misión AyA: Kattya Ramírez Barrera

Motivo del viaje: Participación del Coloquio de Legislación Ambiental "The transformation of Environmental Law and Governance: Innovation, Risk and Resilience", organizado por la Academia de Legislación Ambiental de la UICN

Contacto en el lugar de misión: Claire McConnell. Correo electrónico claire.mcconnell@strath.ac.uk

1. Introducción

En el Coloquio se abordaron distintas temáticas en materia ambiental, que implicaron un análisis desde el ámbito legal para los alcances, nuevos retos y replanteamientos que representan la protección a los derechos humanos ante los grandes desafíos que se tiene por los efectos del cambio climático y la continuidad de las actividades industriales. Se visualiza la necesaria participación de la sociedad en la toma de decisiones en temas ambientales, así como aspectos que están presentes y que deben ser considerados por los distintos países en la toma de decisiones tales como el riesgo y la incertidumbre ante el desconocimiento que se tiene sobre los verdaderos alcances e impactos en los ecosistemas como resultado de las actividades industriales.

2. Objetivos

• General: Explorar el papel de la ley y la gobernanza considerando los desafíos y riesgos, que implican la tecnología y la innovación a fin de desarrollar la resiliencia.

• Específicos:

Reevaluar el concepto de resiliencia en un mundo en el que el derecho ambiental y la gobernanza se están transformando constantemente.

Evaluar los riesgos derivados de la tecnología y la innovación y su impacto en la resiliencia de áreas específicas, como el cambio climático, los océanos, la salud, el espacio ultraterrestre, entre otros.

Debatir sobre innovación, tecnología, riesgo y resiliencia a diferentes niveles y escalas de la legislación ambiental y la gobernanza; subnacionales, nacionales, regionales, internacionales y transnacionales

Debatir sobre el papel de la ley y la gobernanza dentro del cambio climático y la geoingeniería.

3. Desarrollo del Informe

Antecedentes

Este Coloquio corresponde a la actividad número 16 que realiza la Academia de Legislación Ambiental, la cual forma parte de la UICN, un organismo internacional para la conservación de la naturaleza, adscrito a la ONU. Para la participación en este evento, se recibió una carta de invitación por parte del organizador del Coloquio señor Francesco Sindico, de la Universidad de Strahclyde, en la Ciudad de Glasgow-Escocia. El evento se realizó en el Centro de Tecnología e Innovación de la Universidad, con una amplia participación de los miembros de la UICN, así como de representantes de distintos países, tanto de la academia de legislación ambiental, como de instituciones públicas y privadas.

En el caso particular, la Dirección Jurídica y en especial el Area Legal Ambiental, es la encargada de coadyuvar y proponer las modificaciones y nuevos requerimientos en políticas institucionales y materia regulatoria que incluya la temática ambiental, de forma que ésta integre los aspectos ambientales que como parte de las competencias institucionales deben ejercerse tanto en materia de agua potable, saneamiento y protección del recurso hídrico.

- Agenda de la actividad. Se adjunta como documento anexo.
- Desarrollo de la Agenda: Sesiones (Diarias) El coloquio consistió en 64 sesiones divididas a lo largo de los 3 días del evento, donde se trataron temas muy variados en materia ambiental, igualmente se realizaron sesiones plenarias durante los 3 días, una actividad introductoria y una de conclusiones y cierre.
- Visitas realizadas. No.

4. Conclusiones /acuerdos/Recomendaciones

Entre algunas de las conclusiones a que se arribó desde el ámbito legal, se mencionan algunas de las mas relevantes, considerando que la actividad fue sumamente amplia en el abordaje de las distintas temáticas:

I. Existe una indivisibilidad de los derechos humanos en el contexto de los derechos ambientales, son codependientes.

Hay una iniciativa para identificar y promover las conexiones legales entre los derechos humanos y el medio ambiente, este derecho que debe ser de calidad, participa de los derechos civiles y políticos (incluidos especialmente los derechos a la información, la participación y el acceso a la justicia) y a una gran cantidad de redes sociales, derechos económicos y culturales, como el derecho a la educación, a la vivienda, al agua y a la alimentación y la seguridad alimentaria, así como a los derechos que se comparten en ambas listas, incluido el derecho a la vida y el derecho a la dignidad humana.

Hay una tendencia en el constitucionalismo global de fusionar el listado completo de derechos que las personas buscan proteger; el derecho a un medio ambiente saludable se encuentra cada vez más en las listas de derechos exigibles judicialmente, a menudo en un lenguaje que reconoce tanto la salud del entorno natural, así como a la salud de quienes viven en él. A su vez, los tribunales constitucionales están desarrollando el hábito de interpretar los derechos en relación

armoniosa entre sí, incluyendo derechos y derechos ambientales amenazados por daños ambientales.

Este crecimiento doméstico de la jurisprudencia, ahora incluye cada vez más la atención al cambio climático, proporcionando un modelo para el reconocimiento a nivel internacional de la interdependencia de todas las generaciones de derechos.

II. Aunque el derecho humano a un medio ambiente sano se ha incluido en muchos acuerdos y las constituciones de más de 100 países, las Naciones Unidas todavía no lo reconoce. En marzo de 2018, el Relator Especial de las Naciones Unidas sobre los derechos humanos y ambiente, hizo una instancia sobre los principios marco, que establecen las normas básicas de derechos humanos relacionados con la protección del medio ambiente, e instó al Consejo de Derechos Humanos de la ONU a apoyar esta iniciativa.

III. La "democracia ambiental" es uno de los conceptos clave para el desarrollo sostenible.

Para implementar apropiadamente el Principio 10 de la Declaración de Río, el Convenio de Aarhus y las Directrices de Bali exigen garantizar tres derechos de acceso a procedimientos relativos al acceso a información, participación en la toma de decisiones y acceso a la justicia.

En la participación ciudadana efectiva intervienen factores tales como el marco de tiempo disponible para la oportunidad de participación, métodos de identificación y participación de los interesados, frecuencia, manejo de las opiniones y la posibilidad de entablar demandas.

IV. Se desarrolla un nuevo concepto de resiliencia en la política regulatoria, a partir del hecho que la sociedad enfrenta amenazas de catástrofes naturales y daños sustanciales que resultan en efectos del cambio climático: fenómenos meteorológicos intensos, cambios en el nivel del mar, calor, etc. Ante estas amenazas, las llamadas de atención provienen de una variedad de fuentes para un cambio del riesgo convencional, distintos enfoques de evaluación y gestión de enfoques basados en la resiliencia. La resiliencia tiene muchas definiciones, incluida la capacidad del sistema de "planificar y prepararse, absorber, responder y recuperarse de desastres y adaptarse a nuevas condiciones, enfoques sobre la evaluación de riesgos y la gestión de riesgos en los entornos normativos pertinentes, que incluyen pensar en la seguridad de las instalaciones industriales (refinerías / plantas químicas), las operaciones de plantas de energía nuclear, infraestructura, respuesta de emergencia, uso de la tierra y aprobaciones de desarrollo.

5. Observaciones

La actividad es organizada anualmente, siendo la propuesta del próximo evento a realizar, en Malasia a la cual es importante se nos brinde la oportunidad de asistir, dada la dinámica que tiene la materia ambiental y sus requerimientos de poder adecuar en la medida de lo posible las regulaciones y toma de decisiones de los distintos actores públicos y privados en estos temas.

6. Anexos

Informe realizado por Kattya Ramírez Barrera, Dirección Area Legal Ambiental,

Wednesday 4 July 2018

9:30 – 10:45 Introduction (Plenary) Venue: TIC Main Auditorium

10:45 - 12:30 Parallel sessions

- Communities and Indigenous Peoples in Energy
- Water, Technology and Infrastructure
- Sustainable Fisheries
- Technology for Land, Food and Agriculture Implementation
- o Environmental Litigation: Principles, Justice, Rights of Nature and Indigenous People
- New Horizons in Sustainable Development
- o Risky Businesses and Environmental Protection
- Operationalizing the Climate Regime
- Climate Law, Technology, and Legal Discourse
- Voices, Rights and Interactions in Biodiversity law
- Costa Rica-Nicaragua and Compensation for Environmental Damages
- Ecological Law and Governance

Communities and Indigenous Peoples in Energy 4/7/18 10.45/12.30 Venue: TIC Conference Room 1

Chair: Kim Bouwer, Strathclyde Centre for Environmental Law and Governance

José Rubens Morato Leite; Paula Galbiatti and, Marina Venâncio, Federal University of Santa Catarina, Brazil, *Hydropower generation and the resilience of traditional communities: the conflicts in the Belo Monte case*

Annalisa Savaresi, University of Stirling, UK, Benefit-sharing and Renewable Energy Generation: A Means to a Just Transition?

Richard Ottinger and, Robert Habermann, Achinthi Vithanage, Center for Environmental Legal Studies, Elisabeth Haub School of Law, Pace University, New York, USA, Community Renewable Energy Innovation Laws for Sustainable Development

Anita Rønne, University of Copenhagen, Denmark, Energy innovation and transition for smart cities







Water, Technology and Infrastructure 4/7/18 10.45/12.30 Venue: TIC Conference Room 4

Chair: Germarié Viljoen, North-West University, South Africa

Michael Kidd, University of KwaZulu-Natal, South Africa, Sanitation infrastructure and fitness for purpose: Some thoughts about regulation in South Africa

William Piermattei and, Devon Harman, University of Maryland Carey School of Law, USA, Low-Tech Water Recycling Innovation in the West Bank: A Potential Solution to Water Scarcity and Wastewater Management

Janice Gray, University of New South Wales, Australia, "Oh, what a tangled web we weave...when first we practice to deceive":- water theft, water trading, technology and resilience

Antti Belinskij, University of Eastern Finland and Finnish Environment Institute SYKE, Finland, Sustainable Bioeconomy through Nutrient Credits Regulation?

Sustainable Fisheries

4/7/18 10.45/12.30 Venue: TIC Conference Room 8

Chair: Mara Ntona, Strathclyde Centre for Environmental Law and Governance

Gloria Estenzo Ramos, Oceana Philippines, Convergence for Sustainability in the Era of Uncertainty

Gerry Nagtzaam, Monash University, Australia, 'Gotta catch them all': The International Commission for the Conservation of the Atlantic Tunas and the race to prevent Atlantic tuna extinction

Pierre Cloutier de Repentigny, University of Ottawa, Canada, Science-Fiction at Sea: A Critical Overview of the Role of Science and Technology within International Fisheries Law

Melanie Murcott, University of Pretoria, South Africa, Exploring the potential of resilience thinking to respond to the plight of South Africa's Dwesa-Cwebe fishing community

Technology for Land, Food and Agriculture Implementation 4/7/18 10.45/12.30 Venue: TIC Conference Room 2

Chair: Margherita Brunori, Università Statale di Milano, Italy

Evan Hamman, Queensland University of Technology, Australia; Gabriel Leuzinger Coutinho, University of Brasilia, Brazil, and, Marcia Dieguez Leuzinger, Brasilia University Centre, Brazil, *Using satellite technology to enhance biodiversity protection: a comparative study of land clearing in Brazil and Australia*

Christine Frison, University of Antwerp and Université Catholique de Louvain, Belgium and, Thomas Gils, DLA Piper, Belgium, Blockchain technology for food security: resilience potential and risk identification for the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture

Feja Lesniewska, Research Associate at STEaPP, UCL, London, UK, *The missing link?* Using blockchain to tackle transnational illegal timber trade

Andrew Lawson, The Australian Centre for Agriculture and Law, School of Law, University of New England, Armidale, Australia, Suing for sustainability: challenges to consumer-led environmental protection in Australia's consumer protection regime

Environmental Litigation: Principles, Justice, Rights of Nature and Indigenous People 4/7/18 10.45/12.30 Venue: TIC Lecture Theatre Level 1

Chair: Marie-Catherine Petersmann, European University Institute, Florence, Italy

Caiphas Brewsters Soyapi, North-West University, South Africa, The right to a healthy environment in the context of EIA and the precautionary principle in Eastern and Southern African courts

Charito Sawali, Presiding Judge, Municipal Circuit Trial Court Malvar-Balete, Batangas, Philippines, *The Philippine Supreme Court and the Scales of Justice for Sustainable Development*

José Rubens Morato Leite and, Marina Venâncio, Federal University of Santa Catarina, Florianopolis, Brazil, *Rights of Nature in Brazilian Case-Law: A feasible approach for dealing with global risks?*

Dustin Klaudt, Osgoode Hall Law School, Canada, Embracing Indigenous Rights Through Litigation to Protect the Climate: Can Rights-Based, Public Trust, and Standing Climate Litigation Strategies Be Successfully Applied in the Context of Aboriginal Rights and Title Litigation in Canada

New Horizons in Sustainable Development 4/7/18 10.45/12.30 Venue: TIC Conference Room 5

Chair: Laura S. Lynes, The Rockies Institute (TRI), Alberta, Canada

Stefan Gruber, Hakubi Center for Advanced Research, Kyoto University, Japan, *Cultural heritage protection and sustainable development in Asia*

Sophie Riley, University of Technology Sydney, Sydney, Australia, Sustainable Development and the United Nations Dialogues: Changing Sensibilities and Living in Harmony with Nature

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Mahito Shindo, Waseda University, Tokyo, Japan, Environmental Mindset Archives Project (E-MAP): a trial for intergenerational preservation of the environmental ethos

Yetty Komalasari Dewi, Universitas Indonesia, *The Implementation of Green Banking Concept: Underpinning the Lender's Liability for Environmental Damages*

Risky Businesses and Environmental Protection 4/7/18 10.45/12.30 Venue: Collins 201

Chair: Melissa Powers, Lewis & Clark Law School, Portland, Oregon, USA

Tri Hayati and, Andri G. Wibisana, University of Indonesia, Reclamation and Post-Mining Guarantees in Indonesia: An Economic Instrument Suited for Indonesia?

Jacqueline Cavalcant; Andre Leao; Romana Arauj; Jorge Nogueira, University of Brasilia, Brazil and; Amanda Kennedy, University of New England, Australia, *Risk, resilience and environmental justice: Environmental governance in the wake of the Mariana Mine Disaster*

Izabela Zanotelli Collares; Danuta Nogueira de Souza Calazans and, Mônica Thaís Souza Ribeiro (in absentia), Ceub, Brasilia, Brazil, *Lá Na Morada: The right at the light of living experience*

Patryck de Araujo Ayala and; Mariana Carvalho Victor Coelho, Federal University of Mato Grosso, Brazil, Fracking situations: how far do our environmental laws go when it comes to technological uncertainties?

Operationalizing the Climate Regime 4/7/18 10.45/12.30 Venue: TIC Conference Room 6

Chair: Wil Burns, American University, Washington DC, USA

Blaise-Pascal Ntirumenyerwa Mihigo, University of Kinshasa, University Simon Kimbangu, Democratic Republic of the Congo, *Green Climate Fund: Is the Legal Framework of the Democratic Republic of Congo Ready?*

Patricia Galvao Ferreira, University of Windsor, Canada, Unpacking the Law and Governance Aspects of South-South Technological Cooperation in the Climate Regime

Freedom-Kai Phillips, Center for International Governance Innovation, Waterloo, Canada, Participation of "Non-Party Stakeholders" under the United Nations Framework Convention on Climate Change: Options for Future Engagement

Patricia Hania, Ted Rogers School of Business, Ryerson University, Toronto, Canada, Regulatory Innovation: Responsiveness & Eco-Resiliency –Rethinking the Future of Water Regulation Theory in Response to Climate Change

Climate Law, Technology, and Legal Discourse 4/7/18 10.45/12.30 Venue: TIC Conference Room 7

Chair: Afshin Akhtar-Khavari, Queensland University of Technology

Yuhong Zhao, The Chinese University of Hong Kong, Hong Kong, China, Regulatory Control of Environmental Risks of CCS in China

K.J. (Kars) de Graaf and, H.D. (Hanna) Tolsma, University of Groningen, Netherlands, Towards a Dedicated Climate Act in the Netherlands? Sound Legal Reasoning or Symbolic Legislation

Jordi Jaria i Manzano, Universitat Rovira i Virgili, Tarragona, Catalonia, Spain, Rebuilding Constitutional Discourse for Climate Justice

Paola Villavicencio Calzadilla, North-West University, South Africa, Technology and the Enforcement of the Rights of Nature: Some Insights from Bolivia

Voices, Rights and Interactions in Biodiversity Law 4/7/18 10.45/12.30 Venue: TIC Conference Room 3

Chair: Laura Movilla Pateiro, University of Vigo, Spain

Elisa Morgera, Strathclyde Centre for Environmental Law and Governance, Sharing the benefits of scientific progress fairly and equitably: the contribution of international biodiversity law to the realization of the human right to science (...and the right to development?)

Xiaoou Zheng, University of Edinburgh, UK, Analysing the Implementation of the Nagoya Protocol in China: Challenges and Opportunities for Traditional and Local Communities

David Takacs, University of California Hastings College of the Law, San Francisco, California, USA, Whose Voices Count in Innovative Biodiversity Conservation? Ecological Democracy in Biodiversity Offsetting, REDD+, and Rewilding

Outi Manninen, University of Eastern Finland, "De-materialization" of genetic resources and future relevance of the Nagoya Protocol: Can dynamic interpretation ensure the relevance of the international ABS regime?







Costa Rica-Nicaragua and Compensation for Environmental Harm 4/7/18 10.45/12.30 Venue: Court Senate

(Session organized by Rutgers University and Foley Hoag LLP)
Chair: Francesco Sindico, Strathclyde Centre for Environmental Law and Governance

Cymie Payne, Rutgers University, New Jersey, USA, Roots and Branches of Compensation for Environmental Harm

Andrew Loewenstein, Foley Hoag LLP, Boston, USA, Costa Rica v. Nicaragua: The International Court of Justice and the Frontiers of Valuing Environmental Impacts

James Harrison, University of Edinburgh, UK, The turning tide of compensation for pure environmental damage: implications of Costa Rica-Nicaragua for other international regimes

Silja Voeneky, University of Freiburg, Germany, *The ICJ Costa Rica v. Nicaragua Judgement - a Game Changer?*

Ecological Law and Governance (Session organized by the Ecological Law and Governance Association). *This session will end at 12:45.*

4/7/18 10.45/12.45 Venue: Insights Institute, Collins Building

Chair: Klaus Bosselmann, University of Auckland, New Zealand, Key Issues of Ecological Law and Governance

Massimiliano Montini, University of Siena, Italy, *The Genesis of ELGA: From the Oslo Manifesto to the Siena Declaration*

Kathryn Gwiazdon, Center for Environmental Ethics and Law, Role of Ethics in Ecological Law and Governance

Lisa Mead, Earth Law Alliance, Systemic Change in Law: Rights of Nature as a Driver for Ecological Health

Klaus Bosselmann, University of Auckland, New Zealand, Key Issues of Ecological Law and Governance

12:30 – 14:15 Lunch and poster presentations

13:00 – 14:00 IUCN Academy of Environmental Law Academy Annual Collegium Venue: TIC Main Auditorium

14:15 - 15:45 Key Note Speakers (Plenary)

Venue: TIC Main Auditorium

Chair: Jessica Steinberg Albin, Elisabeth Haub School of Law, Pace University, USA

<u>Tianbao Qin</u>, Luojia Professor of Law, Wuhan University, China, *Social Transformation and Environmental Law: Challenges and Responses*

Maria Lee, Professor of Law at University College London, UK, Wind Energy Infrastructure: Governing Scale

15:45 - 16:15 Coffee break

16:15 - 18:00 Parallel sessions

- Energy Regulation and Governance
- Redefining Water Risk, Resilience and Uncertainty
- o Dealing with Risk and Technology in the Oceans: State and Corporate Social Responsibility
- Sustainable Agriculture and Food Systems: From Law-making to Implementation
- Let's Give Nature Rights: The Role of Litigation
- Civil Society and Community Participation in Environmental Law and Governance
- Technology, Innovation, Resilience and Climate Change
- Technology and Innovation: New Horizons in Climate Mitigation
- Scales and Levels: Issues in Biodiversity and Transboundary Environmental Governance
- Preserving Nature in International Law: What Innovations Have Arisen from the Emergence of Sustainable Development within UNESCO Cultural Conventions?
- Legal and Governance Challenges of Climate Geoengineering

Energy Regulation and Governance

4/7/18 16.15/18.00 Venue: TIC Conference Room 1

Chair: Kim Bouwer, Strathclyde Centre for Environmental Law and Governance

Yuan Yang, Tilburg University, Netherlands, Reforming China's Offshore HSE Regulation: Risk and Resilience Approaches?

Melissa Powers, Lewis & Clark Law School, Portland, Oregon, USA, Effective Energy Governance in an Age of Transition

Amanda Kennedy, University of New England, Australia, and Cameron Holley (in absentia), UNSW Sydney, Australia, Regulating unconventional gas technology: Approaches to governing the energy-water nexus in Queensland, Australia and Texas, USA

Laurel Besco, University of Toronto Mississauga, Canada, Engendering Norm Development as an Innovative Approach to Reaching Energy Efficiency Goals







Redefining Water Risk, Resilience and Uncertainty 4/7/18 16.15/18.00 Venue: TIC Conference Room 2

Chair: Julie Gibson, Strathclyde Centre for Environmental Law and Governance

Zaki Shubber, IHE Delft Institute for Water Education, Netherlands, Legally resilient international instruments for uncertain water systems

Rebecca Bates, Queen Mary University of London, UK, Defining Water: An Exploration of International Governance and Technology

Stellina Jolly, South Asian University, India, Evaluating the Community Resilience in Promoting Social Justice in Ground Water Governance: Lessons from India

Dealing with Risk and Technology in the Oceans: State and Corporate Social Responsibility

4/7/18 16.15/18.00 Venue: TIC Conference Room 8

Chair: Gabriela A. Oanta, Salvador de Madariaga University Institute for European Studies, University of A Coruña, Spain

Grant Dawson, Organisation for the Prohibition of Chemical Weapons, Assessing the Opportunities and Risks of New Technologies Designed to Raise Sea-Dumped Chemical Weapons from the Ocean Floor

Luisa Cortat Simonetti Goncalves, Maastricht University, Netherlands and Vitoria Law School (FDV), Brazil, Challenges and Pathways to Fight the Plastic Pollution in the Oceans: A Law and Economics Analysis of CSR and Private Initiatives

Roger Joseph Guzman, Oceana Philippines, Vessel Monitoring in Fisheries Law: Using Tracking Technology and Innovation to Ensure Sustainability of Philippine Fisheries

Sam Adelman, University of Warwick, UK, Geoengineering: Rights, Risks and Ethics

Sustainable Agriculture and Food Systems: From Law-making to Implementation 4/7/18 16.15/18.00 Venue: TIC Conference Room 3

Chair: Amber Prasad Pant, Tribhuvan University, Kirtipur, Kathmandu, Nepal

Heather McLeod-Kilmurray, Centre for Environmental Law and Global Sustainability, University of Ottawa, Canada, *Transforming Trade Law for Sustainable Food Systems*

Hope Johnson, Queensland University of Technology, Brisbane, Australia, Cellular agriculture: governance, ethics and challenges

Iyan Offor, Strathclyde Centre for Environmental Law and Governance, Livestock farming, animal welfare and trade: the problem with "blood farms" and pregnant mare's syrum gonadotropin

Andrea Keessen, Utrecht University, Netherlands, Manure between waste and resource status

Let's Give Nature Rights: The Role of Litigation 4/7/18 16.15/18.00 Venue: TIC Lecture Theatre Level 1

Chair: Mary Neal, University of Strathclyde

Kevin Hille and, Damen Ward (in absentia), Crown Law Office New Zealand, New Zealand, Maori water rights claims and reforming the freshwater management system

Amrisha Pandey, University of Leeds, UK, Rights, Rivers and Climate Change

Rose-Liza Eisma-Osorio, University of Cebu, Philippines, *The Dolphins' Right to Sue through Human Legal Guardians*

Laura S. Lynes, The Rockies Institute (TRI), Alberta, Canada, Legal Personhood of Nature as a Legal Instrument in Addressing Climate Change

Civil Society and Community Participation in Environmental Law and Governance 4/7/18 16.15/18.00 Venue: TIC Conference Room 6

Chair: Angela Lee, University of Ottawa, Canada

Wiwiek Awiati, Faculty of Law, University of Indonesia, SLAPP Threats on Community Participation in Environmental law Enforcement in Indonesia

Anna Berti Suman, Tilburg Institute for Law, Technology and Society, Tilburg University, Netherlands, Citizen Sensing for a co-governance of the risk: the Fukushima Safecast case

Marjan Peeters, Maastricht University, Netherlands, Notifying environmental risks of technological innovations: Effective ENGO action based on collecting information and freedom of expression

Lee Paddock and, Robert Glicksman, The George Washington University Law School, USA, Citizen Science in Support of Environmental Protection: Innovations, Opportunities and Barriers







Technology, Innovation, Resilience and Climate Change 4/7/18 16.15/18.00 Venue: TIC Conference Room 5

Chair: Harro van Asselt, University of Eastern Finland

Mahatab Uddin (in absentia) and Saiful Karim, Queensland University of Technology, Brisbane, Australia, Innovation and transfer of environmentally sound technologies and the Paris Agreement

Felicity Deane and, Anna Huggins, Queensland University of Technology, Brisbane, Australia, MMRV for Greenhouse Gas Emissions from Ships: Implications for Transparency and the Uptake of New Technologies

Afshin Akhtar-Khavari, Queensland University of Technology, Brisbane, Australia, Technology and the Recovery of Nature in the Anthropocene Epoch

Alexander Zahar, Wuhan University, Wuhan, China, and, He Xiangbai, Soochow University, Suzhou, China, *Innovation in State Reports on Climate Change Action*

Technology and Innovation: New Horizons in Climate Mitigation 4/7/18 16.15/18.00 Venue: TIC Conference Room 4

Chair: Michelle Barnard, North-West University, South Africa

Karolina Jackowicz, University of Bialystok, Bialystok, Poland, Al (artificial intelligence) and the protection of the environment

Stephen Minas, Peking University, Shenzhen, Guangdong, China, The UNFCCC Technology Executive Committee as a Driver of Innovation in the Law and Governance of Climate Technology

Loretta Feris, University of Cape Town, South Africa, *The use of Technology in Times of Environmental Disaster: Trumping Human Rights?*

Nicky Broeckhoven, Tilburg University, Tilburg, Netherlands, Linking Gender, Technology and Climate Change: Opportunities and Challenges in the International Climate Change Regime

Scales and Levels: Issues in Biodiversity and Transboundary Environmental Governance

4/7/18 16.15/18.00 Venue: TIC Conference Room 7 Chair: Mar Campins Eritja, University of Barcelona, Spain

Ancui Liu, Maastricht University, Maastricht, Netherlands, The international liability and redress regime regarding environmental damage caused by cultivation of genetically modified crops—links with the Environmental Liability Directive

Emma Mitrotta, University of Trento, Italy, Decentralised International Cooperation: Rescaling governance over transboundary natural resources in Europe

Shawkat Alam, Centre for Environmental Law, Macquarie University, Sydney, Australia, Technological Assistance and the North South Divide: In Search of Equitable Sharing of New Environmental Technologies with the Protection of Intellectual Property

Lucy Lu Reimers and, Dario Piselli, Graduate Institute of Geneva, Switzerland, International Biodiversity Law in the Age of Planetary Boundaries: legal Innovation to Confront Global Environmental Change Across Scales

Preserving Nature in International Law: What Innovations Have Arisen from the Emergence of Sustainable Development within UNESCO Cultural Conventions? 4/7/18 16.15/18.00 Venue: Insights Institute, Collins Building

(Session organized by the UNESCO Chair on the Diversity of Cultural Expressions at the University of Laval, Canada)

Véronique Guèvremont, Université Laval, Quebec, Canada, The Recognition of the Cultural Dimension of Sustainable Development in International Law

François Huleux, Université Laval, Quebec, Canada and Université Paris-Saclay, France, Innovative Techniques for the Safeguarding of Intangible Cultural Heritage Associated with Biodiversity

Caecilia Alexandre, Université Laval, Quebec, Canada, and Université de Montréal, Canada, The Indigenous Peoples' Holistic Approach of Culture as a Way to Better Preserve Nature: The Role of the UNESCO Cultural Conventions

Géraud de Lassus Saint-Geniès, Center for International Governance Innovation; McGill University, Montreal, Canada, *Protecting and Promoting Cultural Diversity as a Climate Policy*

Clémence Varin, Université Laval, Quebec, Canada, The Environmental Challenges Raised by the Protection and Promotion of the Diversity of Cultural Expressions in the Digital Age

Legal and Governance Challenges of Climate Geoengineering 4/7/18 16.15/18.00 Venue: Court Senate

(Session organized by Centre for International Governance Innovation, Waterloo, Ontario, Canada)

Chair: Silvia Maciunas, Centre for International Governance Innovation (CIGI)

Neil Craik, University of Waterloo, Canada, *Transparency-based Governance for Climate Engineering Research*

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Wil Burns, Professor, American University, Washington DC, USA, *The Paris Agreement and Climate Geoeongineering Options*

Matthias Honegger, IASS-Potsdam, Germany, *The sustainable development goals: the right context for assessing climate engineering?*

Colloquium reception at the City Chambers, 82 George St, Glasgow G2 1DU – kindly provided courtesy of The Rt Hon the Lord Provost of Glasgow, Councillor Eva Bolander. The reception <u>will begin at 18.30</u> and all are welcome; there is no need for a separate registration. The reception will last for one hour.





Thursday 5 July 2018

08:00 – 09:00 **Registration** @ <u>Technology and Innovation Centre</u>, University of Strathclyde, 99 George Street, Glasgow, G1 1RD.

09:00 - 10:45 Parallel sessions

- Oil and Gas
- Flooding, Innovative Technology and Investment
- Lost at Sea: New Challenges for Law and Governance
- Environmental Litigation: Risk, Tort, Technology and Science
- Innovation and Transformation in Environmental Law and Governance
- o International Environmental Law: Fit for Purpose?
- o Climate Change: Process, Planning and the Rule of Law
- Governing Climate Change Risk
- Climate Change Impacts and Adaptation
- o Climate Change, Business and Human Rights
- The International Governance of Traditional Knowledge associated with Genetic Resources: Rethinking Policies and Tools for Bridging Indigenous Rights with Intellectual Property Systems

Oil and Gas

5/7/18 09.00/10.45 Venue: TIC Conference Room 6

Chair: José Juan Marquez, Metropolitan Autonomous University, Mexico

Andri Wibisana; Savitri Nur Setyorini and; Angela Vania Rustandi, University of Indonesia, Valuation of Natural Resource Damage (NRD) from Oil Pollution in Indonesia: Critical Comments of NRD Assessment in the Montara Case

Eloamaka Carol Okonkwo, Strathclyde Centre for Environmental Law and Governance, Appraising the Regulation of Gas Flaring in a Technological Evolving World as a way of Reducing Gas-Related Pollution in Nigeria

Kyriaki Noussia, University of Exeter, UK, Cyber-crime in the offshore oil and gas industry: insurance, environmental and sustainability perspectives

Mar Campins Eritja, University of Barcelona, Spain, From "Go beyond oil" to "Drill, baby, drill": The unsteady US policy concerning Arctic oil and gas exploration and exploitation







Flooding, Innovative Technology and Investment 5/7/18 09.00/10.45 Venue: TIC Conference Room 8

Chair: William Piermattei, University of Maryland Carey School of Law, USA

Mitsuo Matsumoto, Osaka University, Japan, Water Law Reform to Adapt to Climate Change: From Flood Prevention by man-made Structures towards Mitigation of Damages through Land Use Policies

Philippa England, Griffith University, Australia, Adaptive risk management or precaution resurgent? The treatment of flooding risks in Australian courts

Catherine Tinker, Seton Hall University, New Jersey, USA, Who's Counting? UN SDG Indicators, Big Data, and Citizen-Generated Data for Implementation of Policy and Law

Yulia Levashova, Utrecht Centre for Water, Oceans and Sustainability Law, Utrecht University, Netherlands, The privatisation of water services in international investment disputes

Lost at Sea: New Challenges for Law and Governance 5/7/18 09.00/10.45 Venue: TIC Conference Room 3 Chair: Gloria Estenzo Ramos, Oceana Philippines

Gabriela A. Oanta, Salvador de Madariaga University Institute for European Studies. University of A Coruña (Spain), Access to Remedy in the European Union in Case of Breaches of Human Rights at Sea by Private Actors

Prue Taylor, University of Auckland, New Zealand, Oceans Governance and Marine Protected Areas: Turning the Tide

Anastasia Telesetsky, University of Idaho, Messages in Plastic Bottles? Reflections on International and Domestic Law and Policy Interventions to Manage Marine Plastics

Renée Martin-Nagle, Strathclyde Centre for Environmental Law and Governance, Governance of Offshore Freshwater Resources

Environmental Litigation: Risk, Tort, Technology and Science 5/7/18 09.00/10.45 Venue: TIC Conference Room 1

Chair: Caroline Foster, University of Auckland, New Zealand

Ceri Warnock, University of Otago, Dunedin, New Zealand, Adjudicative innovation in risk and resilience

Michael Hantke-Domas, Justice of the Third Environment Court of Chile, and Carlos G. Ellenberg Oyarce (in absentia), Attorney Advisor at the Third Environment Court of Chile, Ecosystem services and the adjudication of environmental damage disputes: the birth of an environmental tort

Sroyon Mukherjee, London School of Economics and Political Science, London, UK, Judicial Review of Environmental Valuation: Challenging the Adequacy of US Regulatory Cost-Benefit Analysis

Marie-Catherine Petersmann, European University Institute, Florence, Italy, Conflict Adjudication or Expert Rule? Scientific Semantics of Legitimacy in Environmental Cases

Innovation and Transformation in Environmental Law and Governance 5/7/18 09.00/10.45 Venue: Court Senate

Chair: Bjørn-Oliver Magsig, University College Cork, Ireland

Rosalind Malcolm, University of Surrey, Guildford, UK, Designing legal tools for the regulation of a circular economy

Robert Fowler, University of South Australia, New Principles for the Next Generation of Environmental Law

Robert V. Percival, University of Maryland Carey School of Law, USA, A History of Innovation in Global Environmental Law and Policy

Grit Ludwig, Helmholtz Centre for Environmental Research, Leipzig, Germany, *The contribution of Law to Transformative Environmental Policy: The example of the Construction Sector*

International Environmental Law: Fit for Purpose? 5/7/18 09.00/10.45 Venue: TIC Conference Room 7 Chair: Duncan French, Lincoln University, Lincoln, UK

Kazuki Hagiwara, Fukuoka University, Fukuoka, Japan, *Are Shared Resources a State Good or a Global Public Good?*

Santiago Vallejo Galárraga, University of Szeged, Hungary, *Greening of International Adjudications*

Tseming Yang, Santa Clara University School of Law, California, USA, *The Emergence of the Environmental Impact Assessment Norm as a Global Environmental Law Principle*

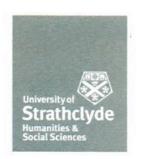
Maria Antonia Tigre, Elisabeth Haub School of Law, Pace University, USA, *The Global Pact for the Environment as a Framework for International Law*

Climate Change: Process, Planning and the Rule of Law

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5/7/18 09.00/10.45 Venue: TIC Conference Room 2

Chair: Denise Antolini, University of Hawaii, USA

Michelle Barnard, North-West University, South Africa, Climate Change Litigation in South Africa: The Evolution of Environmental Impact Assessments

Meinhard Doelle, Dalhousie University, Halifax, Canada, Environmental Assessment as a Climate Mitigation Tool

Naomi Luhde-Thompson, College of Arts and Law, Birmingham University, UK, Death by a Thousand Cuts: Can Planning Law Tackle the Cumulative Carbon Emissions Impact of Individual Project Decisions Where New Energy Technology Is Involved?

A.T. (Bert) Marseille, H.D. (Hanna) Tolsma, K.J. (Kars) de Graaf, University of Groningen, Netherlands, *The Impact of Supervision on Environmental Decision-making in the Netherlands*

Governing Climate Change Risk 5/7/18 09.00/10.45 Venue: TIC Conference Room 4

Chair: Svitlana Romanko, Vasyl Stefanyk Precarpathian National University, Ukraine

Sanne Akerboom, Utrecht University, Netherlands, Accepted and Perceived Risks: Short Term Risks Arising in Climate Change Mitigation Techniques Versus Long Term Risks of Global Climate Change

Ana Maria Nusdeo, University of São Paulo, Brazil, *The Paris Agreement and Risk Governance: The Role of Transparency and the Sustainable Development Mechanism*

Megan Bowman, Kings College London, UK, Climate Finance Law: Risk, Resilience and Innovation

Emily Webster, King's College London, UK, Transnational Risk Governance and Climate Change

Climate Change Impacts and Adaptation 5/7/18 09.00/10.45 Venue: TIC Conference Room 5

Chair: Leonie Reins, Tilburg University, Netherlands

Michael Addaney, Wuhan University, China, One Belt, One Road and the Law of Adaptation to Climate Change in Africa: Towards a Technology-based Approach to Adaptation

John D. Echeverria, South Royalton, Vermont, USA, Taking Sea Level Rise Seriously: Innovative Responses to Increasingly Dire Predictions of Sea Level Rise

Melissa Ely Melo (in absentia), Vale do Itajaí University (UNIVALI), Brazil, and Kamila Pope, University of Santa Catarina, Brazil, Payment for Environmental Services as an instrument to foster resilience and environmental justice in the context of climate changes in Santa Catarina State

Mehdi Piri Damagh, University of Tehran, Iran, Adaptation in the Paris climate change Agreement and its implication for water scarcity

Climate Change, Business and Human Rights 5/7/18 09.00/10.45 Venue: TIC Lecture Theatre Level 1

Chair: Maria Socorro Manguiat, UNEP

Kim Bouwer, Strathclyde Centre for Environmental Law and Governance, *Innovative Approaches to Benefit-Sharing: Its Use and Potential for Climate Finance*

Eugenia Recio, University of Eastern Finland, The Role of Soft Law in Regulating the Protection of Vulnerable Forest-peoples From Innovative REDD+ Interventions

Jaap Spier, University of Amsterdam, Netherlands and Stellenbosch University, South Africa, *Principles on Climate Obligations of Enterprises*

Sara L Seck, Schulich School of Law and Marine & Environmental Law Institute, Halifax, Nova Scotia, Canada, *Business Responsibilities for Human Rights and Climate Change: Innovating for Remedy and Resilience*

The International Governance of Traditional Knowledge associated with Genetic Resources: Rethinking Policies and Tools for Bridging Indigenous Rights with Intellectual Property Systems

5/7/18 09.00/10.45 Venue: Insights Institute, Collins Building

(Session organized by Centre for International Governance Innovation (CIGI), Waterloo, Ontario, Canada)

Oluwatobiloba Moody, Centre for International Governance Innovation, Waterloo, Canada [Moderator], An Overview of the International Framework and Current Debates Surrounding the Protection of Traditional Knowledge associated with Genetic Resources.

James Hopkins, University of Arizona, USA, Reconciling the Implementation of the Nagoya Protocol with Emerging Intellectual Property Norms for Traditional Knowledge: A North American Case Study

Kathy Hodgson-Smith, Canadian Indigenous Lawyer, Indigenous Peoples and a Vision for Bridging Indigenous Rights with Intellectual Property Systems in the Protection of Traditional Knowledge: Reflections from Canada.

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Olivier Rukundo, ABS Initiative, An Overview of Best Practice Models, Policies and Tools for Reconciling Access and Benefit Sharing with Global Innovation Frameworks: Lessons from the Field.

10:45 - 11:15 Coffee break

11:15 - 13:00 Parallel sessions

- Energy Innovation, Risk and Resilience
- Oceans, Energy and Climate Change
- Smart and Sustainable Cities
- Human Rights and the Environment
- Climate Conflict and Migration
- Climate Justice and Liability
- o Climate Engineering, Negative Emissions, and Carbon Capture and Sequestration
- The Governance of Biodiversity in National and Regional Contexts
- o Challenges in Biodiversity and Traditional Knowledge Governance
- o PP4SD Public Participation for Sustainable Development

Energy Innovation, Risk and Resilience 5/7/18 11.15/13.00 Venue: TIC Conference Room 6

Chair: Aileen McHarg, Strathclyde Centre for Environmental Law and Governance

Verena Madner, Vienna University of Economics and Business, Austria, Fostering Innovation and Learning in Energy Transitions – A Legal Perspective

Albert Ruda, Universitat de Girona, Spain, When the ground starts shaking: who bears the risks of hydraulic fracture?

Topi Turunen, University of Eastern Finland, and, Kim Talus, Tulane University, New Orleans, LA, USA (in absentia), Regulating Emerging Technologies – Gasification in Waste-to-Energy

Seita Romppanen, University of Eastern Finland, *The Role of Law in Promoting Innovations and New Practices for Sustainable Bioeconomy*

Oceans, Energy and Climate Change 5/7/18 11.15/13.00 Venue: TIC Conference Room 1

Chair: Alana Malinde S N Lancaster, University of the West Indies, Cave Hill Campus, Barbados

Jukka Similä and, Niko Soininen, University of Lapland, University of Eastern Finland, and University of Gothenburg, *Legal Mechanisms Facilitating and Hindering Transitions towards Sustainable Blue Economy*

Marleen van Rijswick and, Sander van Hees, Utrecht University, Netherlands, Dealing with environmental risks of marine renewable energy developments in EU waters

Seema Kakade, University of Maryland, USA, MARPOL Annex VI Sulfur Fuel Standards Using Technology for Enforcement and Compliance

Simone Borg, University of Malta, Climate Proofing Ocean Governance: A Journey through Unchartered Waters

Smart and Sustainable Cities

5/7/18 11.15/13.00 Venue: TIC Conference Room 7

Chair: Anél du Plessis, North-West University, South Africa

Paul Stanton Kibel, Golden Gate University, San Francisco, California, USA, A Waterway Repurposed: Nature Parks Rise Along England's Manchester Ship Canal

Jonathan Liljeblad, Swinburne University of Technology Law School, Melbourne, Australia, A Risk Model to Assess World Heritage Sustainable Development Implementation: A Case Study of Pyu Ancient Cities, Myanmar

Koh Kheng Lian, Asia-Pacific Centre for Environmental Law (APCEL), Faculty of Law, Singapore and ASEAN Smart Cities Concept

LYE Lin Heng, Asia-Pacific Centre for Environmental Law (APCEL), National University of Singapore, Fresh Water for Singapore and Phnom Penh – Environmental Law, Policy, Governance & Management: Lessons in Innovation, Risk & Resilience

Human Rights and the Environment 5/7/18 11.15/13.00 Venue: TIC Lecture Theatre Level 1

Chair: Carmen G. Gonzalez, Seattle University School of Law, USA

Michel Prieur and Mohamed Ali Mekouar, International Center for Comparative Environmental Law, University of Limoges, France, A New Frontier in Human Rights Law: The Proposed Third International Covenant on the Right of Human Beings to the Environment (presented on behalf of the authors by Nathalie Herve-Fournereau and Alexandra Langlais)







Emilie Gaillard, University of Caen Normandy, France, Human Rights for Future Generations: Opening the way to new legal actions

Erin Daly and, James R. May, Widener University, Wilmington, Delaware, USA, *Indivisibility of Human Rights and the Environment?*

Bridget Lewis, Queensland University of Technology, Brisbane, Australia, *Emerging Environmental Technologies and the Rights of future generations*

Climate Conflict and Migration 5/7/18 11.15/13.00 Venue: TIC Conference Room 8 Chair: Sylvie Da Lomba, University of Strathclyde

Kayode Babatunde Oyende, Lagos State University, Lagos, Nigeria, Climate Change: Conflicts, Migration, Conservation and Mitigation Strategies

Susana Borràs, Rovira i Virgili University, Tarragona, Spain, Climate Migrations in a Context of Gender Inequalities: Tackling the Injustices of Poverty

Anemoon Soete, Ghent University, Belgium, Self-determination Meets Artificial Islands

Alfredo dos Santos Soares, NOVA University of Lisbon, Portugal, Environmentally and development-induced displaced persons, their protection under the Kampala Convention

Climate Justice and Liability 5/7/18 11.15/13.00 Venue: TIC Conference Room 2

Chair: Joana Setzer, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, UK

Godwin Dzah, University of British Columbia, Canada, Transforming Climate Change Litigation: Incorporating the 'African Voice' into a Global Discourse

Morgan Eleanor Harris, LUMSA University, Rome, Italy, Building Resilience Through Access to Justice: an Analysis of Recent Climate Litigation

Samvel Varvastian, Mykolas Romeris University, Vilnius, Lithuania, *The Evolution of Climate Science and Extreme Event Attribution: Are We on the Verge of Major Breakthrough in Climate Change Liability?*

Andri G. Wibisana and, Conrado M. Cornelius, University of Indonesia, A Tale of Climate Justice: The Indonesian Case – Hope or Nope?

Climate Engineering, Negative Emissions, and Carbon Capture and Sequestration 5/7/18 11.15/13.00 Venue: TIC Conference Room 3

Chair: Leonardus Gerber, University of Pretoria, South Africa

Endrius Cocciolo, Universitat Rovira i Virgili Tarragona, Spain, Governing Climate Geoengineering. In Pursuit of the "just Transition" for the Earth System

Bjørn-Oliver Magsig, University College Cork, Ireland, Environmental justice in the age of geoengineering: Can international law control Pandora's box?

Benoit Mayer, The Chinese University of Hong Kong, Hong Kong, China, Regulating Bioenergy with Carbon Capture and Storage: Existing and Emerging Principles

Manon Simon, Wuhan University, China, Regulating Transboundary Impacts of Weather Modification

The Governance of Biodiversity in National and Regional Contexts 5/7/18 11.15/13.00 Venue: TIC Conference Room 5

Chair: Solange Teles da Silva, Presbyterian Mackenzie University Law School, São Paulo, Brazil

Sabrina Carvalho Verzola, Federal University of Amapá, Brazil and Federal University of São Carlos, São Paulo, Brazil, and Ariadne Chloe Mary Furnival, Federal University of São Carlos, (Postgraduate Programme in STS), São Paulo, Brazil, *Biodiversity, traditional knowledge and innovation: challenges and conflicts concerning the legal system in Brazil*

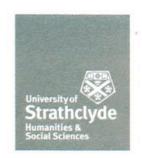
Larissa Verri Boratti, King's Brazil Institute, King's College London, UK, and, Karen Kassmayer, Legislative Consultant, Federal Senate of Brazil, Brasília-DF, Brazil, Environmental Law-making in Brazil: the Case of Regulating the Access to Biodiversity

Chikosa Banda, University of Malawi, Zomba, Malawi, Implications of the proposed reforms to the seed-related policies and laws for seed sovereignty and agro-biodiversity in Malawi

Paul Martin, The Australian Centre for Agriculture and Law, School of Law, University of New England, Armidale, Australia; Amy Cosby, The Australian Centre for Agriculture and Law, School of Law, University of New England, Armidale, Australia, and, Carolina Dutra (in absentia), Lawyer and Researcher in Environmental Law, Mackenzie Presbyterian University, Sao Paulo, Brazil, *Meta-governance for biodiversity protection in Australia and Brazil*







Challenges in Biodiversity and Traditional Knowledge Governance 5/7/18 11.15/13.00 Venue: TIC Conference Room 4

Chair: Mika Schröder, Strathclyde Centre for Environmental Law and Governance

Laura Movilla Pateiro, University of Vigo, Spain, Evolution and challenges in the regulation of marine genetic resources in the European Union

Kylie Lingard, School of Law, University of Wollongong, Wollongong, Australia, and, Mark Perry, University of New England, Armidale, Australia, Forest shadows: An assessment of the regulatory framework of the Western Australian Sandalwood Industry

Guy Jules Kounga, University of Yaoundé, Cameroon, *The Commerciality of Genetic Resources and Traditional Knowledge*

Jacqueline Hand, University of Detroit Mercy Law School, USA, Robust Consultation with Indigenous Peoples Supports Development that is Sustainable

PP4SD - Public Participation for Sustainable Development 5/7/18 11.15/13.00 Venue: Court Senate

(Session organized by Meiji University, Tokyo, Japan)

Hitoshi Ushijima, Chuo University, Tokyo, Japan, How Does EIA Public Participation Work on Japan's Energy Policy?

Noriko Okubo, Osaka University, Japan, Public Participation in EIA and its indicator from the Asian perspective

Tianbao Qin, Wuhan University, China, Progress of Public Participation in Environmental Decision-Making in China: A Slow but Right Direction towards Sustainability

Volker Mauerhofer, Meiji University, Tokyo, Japan, *The EU - Water Framework Directive Protect Case on Climate Change, Technical Progress and Access to Justice: Background, Practices & Pitfalls*

13:00 – 14:15 Lunch and poster presentations

14:15 - 16:00 Parallel sessions

- Liminal Spaces in Energy Governance
- Water, Human Rights and Public Goods
- The Future of Environmental Law and Governance
- What Futures? Techno-Fixes and the Role of Law and Governance in Land, Food and Agriculture

- Environmental Justice
- Risk and Resilience in Environmental Law and Governance
- Climate Change in the Courts
- Energy, Transport, and Supply-side Policies
- Risk, Science and Biodiversity
- Ecosystem Approach, Area-Based Management Tools & Marine Indicators
- Goal Orientation of Environmental Governance A Promising Approach Towards Innovative Sustainable Development?

Liminal Spaces in Energy Governance 5/7/18 14.15/16.00 Venue: TIC Conference Room 8

Chair: Meinhard Doelle, Dalhousie University, Halifax, Canada

Rosemary Lyster, Australian Centre for Climate and Environmental Law, The University of Sydney, Australia, *Innovation, Disruption and Resilience: Electricity grids in the face of climate disasters*

Leonie Reins, Tilburg University, Netherlands, The Inter-Play between Innovation and Regulation: Carbon Capture and Storage in the European Union

Romain Mauger, University of Groningen, Netherlands, *The European legal framework for electricity storage: Who benefits? Who supports the risks?*

James Prest, Australian National University, Legal frameworks to encourage energy storage technologies: Transcending the false dichotomy between energy security and climate security

Water, Human Rights and Public Goods 5/7/18 14.15/16.00 Venue: TIC Conference Room 4

Chair: Zaki Shubber, IHE Delft Institute for Water Education, Netherlands

Ruby Moynihan, University College Cork, Ireland, Benefit-Sharing in Transboundary River Basins: Challenging International Law to Consider Intra-State Equity Regarding Joint Infrastructure

Germarié Viljoen, North-West University, South Africa, Comparative reflections on water in the "public space"

Gayathri D Naik, SOAS, University of London, UK, Inter sectorial allocation of groundwater in India and water scarcity in cities: Human Right To water v Human Right to food?







Mariana Elvira Nogales Paez, Informatic Bolivian University, La Paz, Bolivia, Necessity of the Implementation of Resilience in Law and Policies for a Proper Protection of Natural Resources

The Future of Environmental Law and Governance 5/7/18 14.15/16.00 Venue: TIC Lecture Theatre Level 1

Chair: Jolene Lin, National University of Singapore

Natasha Affolder, University of British Columbia, Canada, Law in Motion: The Role of 'Innovation' in Explaining How & Why Environmental Law Is on the Move

Carmen G. Gonzalez, Seattle University School of Law, USA, *Environmental Justice*, *Natural Disasters and the Social Pillar of Sustainable Development*

Massimiliano Montini, University of Siena, Italy, *Envisioning an ecological approach to environmental law*

Duncan French, Lincoln University, Lincoln, UK, Science, Pseudo-Science and the Quickening Demise of General International Environmental Law?

What futures? Techno-Fixes and the Role of Law and Governance in Land, Food and Agriculture

5/7/18 14.15/16.00 Venue: TIC Conference Room 5 Chair: Shawkat Alam, Macquarie University, Australia

Maureen Papas, University of Western Australia, Land, food and agriculture: Promises and perils of technology and innovation

Angela Lee, University of Ottawa, Canada, Food-tures: Examining the role of technology and law in shaping sustainable food futures

Paul Martin; Grant Pink (in absentia); Mark Perry and; Vivek Nemane, Australian Centre for Agriculture and Law, University of New England, Australia, *The merging frontiers of future-tech and agro-ecological governance*

Siva Barathi Marimuthu (Sharllene), University of New England, Australia, and, Paul Martin, Australian Center for Agriculture and Law, University of New England, Australia, *Bridging the gap between food security and agro-biodiversity*

Environmental Justice

5/7/18 14.15/16.00 Venue: TIC Conference Room 3

Chair: Patricia Hania, Ted Rogers School of Business, Ryerson University, Toronto, Canada

Tokuma Daba, Ambo University Law, Ethiopia, *The Quest for Distributive Environmental Justice in Ethiopia*

Melanie Pimentel, Senior State Solicitor-Office of the Solicitor General, Philippines, Greening the Forests: Protection for Sustainability of Indigenous Lands

Donna Craig and Beatriz Garcia, Western Sydney University, Australia, Legal Governance of Biosphere reserves in the Asian and Pacific Regions: Resilience and Risk in Marginalized and Vulnerable Communities across Different Cultures

Estair Van Wagner, Osgoode Hall Law School, Canada, Extracting Law's Resilience: The Duty to Consult, and Indigenous Environmental Governance on Private Property in Ontario

Risk and Resilience in Environmental Law and Governance 5/7/18 14.15/16.00 Venue: TIC Conference Room 1

Chair: Stellina Jolly, South Asian University, India

Louis J. Kotzé, North-West University, South Africa, Law and the Governance of Risk, Innovation and Resilience in the Anthropocene: Towards a new Lex Anthropocena?

Nathalie Herve-Fournereau, Researcher CNRS, Institut Law and Europe, University of Rennes, France, *The ambivalent concept of socio-ecological resilience: Epistemological reflections on its integration into law from European perspective*

Timothy Malloy, University of California, Los Angeles, USA; Igor Linkov (in absentia), United States Army Corps of Engineers; Benjamin Trump (in absentia), United States Army Corps of Engineers, *Risk, Resilience and Governance*

Alexandra Langlais, CNRS, Institut West: Law and Europe (IODE), Faculty of Law, Rennes, France, Building resilience: towards the development of an ecosystem services law?

Climate Change in the Courts

5/7/18 14.15/16.00 Venue: TIC Conference Room 7 Chair: Annalisa Savaresi, University of Stirling, UK

Eduardo Alvarez Armas, Queen Mary University of London, UK, Indirect International Climate-change Litigation: Compliance with Climate-change Obligations Through State-to-state Trade-related Dispute Settlement







Esmeralda Colombo, University of Bergen Law School, Bergen, Norway, and, Anastasia Giadrossi (in absentia), Food and Agriculture Organization, *Litigation as a Tool for Advancing Climate-Smart Agriculture? A Hypothetical Judicial Case on the Andaman and Nicobar Islands*

Ketan Jha, University of Sussex, UK and Plan B Earth, UK, Networked Public Interest Litigation: A New Framework for Climate Claims?

Joana Setzer, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, UK, Climate Change in the Courts: Governance through Mobilization

Energy, Transport, and Supply-side Policies 5/7/18 14.15/16.00 Venue: TIC Conference Room 6

Chair: Feja Lesniewska, Research Associate at STEaPP, UCL, UK

Harro van Asselt, University of Eastern Finland, and, Cleo Verkuijl (in absentia), Stockholm Environment Institute, Oxford, UK, *Tackling Fossil Fuel Subsidies through International Trade Agreements*

Tom Kerns, Environment and Human Rights Advisory, Yachats, OR, USA, *The Permanent Peoples' Tribunal on Human Rights, Fracking and Climate Change: Evidence, Arguments and Findings*

Ivett Montelongo Buenavista, Metropolitan Autonomous University Campus Azcapotzalco, Mexico City, Mexico, *Transport in Mexico City: A Resilience Challenge facing Climate Change*

Ricardo Pereira, Cardiff University, UK, and, Alberto Quintavalla, Erasmus University Rotterdam, Netherlands, *The Nexus Between 'Energy Security' and 'Ecological Security': the Case for an Integrated Policy Framework for Effective Mitigation and Adaptation to Climate Change*

Risk, Science and Biodiversity

5/7/18 14.15/16.00 Venue: Insights Institute, Collins Building

Chair: José Rubens Morato Leite, Federal University of Santa Catarina, Brazil

David Leary, University of Technology Sydney, Australia, Synthetic Biology is a 'Game changer' for biotechnology. What are its implications for international environmental law?

Elsa Tsioumani, Strathclyde Centre for Environmental Law and Governance, *Bioinformatics* and *Synthetic Biology: addressing new challenges for fairness and equity in genetic resource governance*

An Cliquet, Ghent University, Belgium, Restoring species from extinction: is the law ready for a real Jurassic Park?

Nsikan-Abasi Odong, University of Ottawa, Canada, *The Nigerian National Biosafety Agency Management Act and its Non-Precautionary Approach: Raising the Threshold?*

Ecosystem Approach, Area-Based Management Tools & Marine Indicators 5/7/18 14.15/16.00 Venue: TIC Conference Room 2

Chair: Renée Martin-Nagle, Strathclyde Centre for Environmental Law and Governance

Merachelle Rala Borracho, University of Cebu, Philippines, Sustainable Development: Beyond Good Governance and Grassroot Participation - A Case Study of How a 4th Class Municipality in the Philippines Maintains and Protects Two Marine Sanctuaries within its Territorial Jurisdiction

Dawoon Jung, University of Edinburgh, UK, Towards Sustainable Use of the Oceans: Offshore Renewable Energy Activities and Marine Spatial Planning

Elizabeth A. Kirk, Nottingham Trent University, UK, Mapping International Law to Dynamic Three-Dimensional Ecosystems

Marie Bonnin, French National Institute for Sustainable Development, France, Measuring the effectivité of marine environmental law: leveraging environment protection through the use of innovative tools

Goal Orientation of Environmental Governance - A Promising Approach Towards Innovative Sustainable Development? 5/7/18 14.15/16.00 Venue: Court Senate

(Session organized by the European Environmental Law Forum)

Lorenzo Squintani, Groningen, The Netherlands, *Target and programmatic approach in Lessons from the EU Air Quality Directive and German experiences*

Wolfgang Köck, Leipzig, Germany, Lessons from the EU Air Quality Directive and German experience

Moritz Reese, Leipzig, Germany, Water law and its generation-target for ecologic water quality





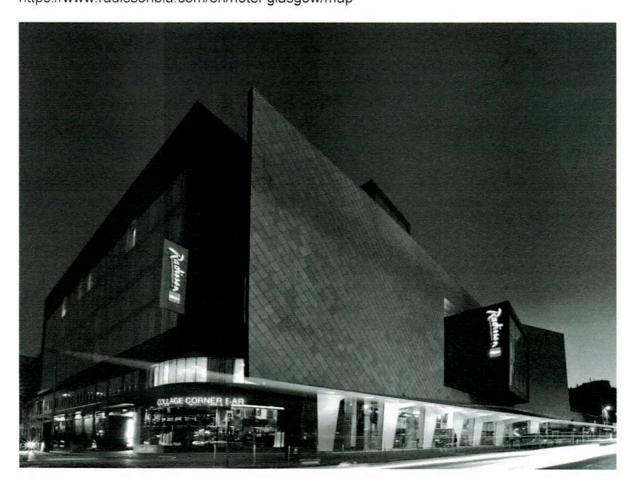


16:00 - 16:30 Coffee break

16:30 – 18:00 Plenary: Entrepreneurial Innovation and Sustainability Venue: TIC Main Auditorium

Scottish Government (Jon Rathjen, Team Leader, Water Industry Team)
Brewgooder (Zoë Cuthbert, Chief Evangelist)
Scottish Power (Andrew Philip- Legal Director Scottish Power Renewables)
Our Power (Dawn Muspratt, Founding Chief Executive)
SASOL (Francisca Wessels, Senior Manager Legal)

1945 - Colloquium Dinner - (separate registration for those attending for less than three days is available here - must be booked by 25th June) @ Radisson Blu Hotel, 301 Argyle Street G2 8DL Glasgow United Kingdom; https://www.radissonblu.com/en/hotel-glasgow/map



Friday 6 July 2018

08:15 - 09:00 Registration @ Technology and Innovation Centre, University of Strathclyde, 99 George Street, Glasgow, G1 1RD.

09:15 - 11:00 Parallel sessions

- Supporting Low-Carbon Energy Transitions
- Transboundary Water Governance
- Land Governance
- Technology and Environmental Law and Governance
- Protection of the Marine Environment and Species & Benefit-Sharing
- Indigenous innovation, Participation and resilience in biodiversity law and governance
- Climate Change and Cities
- o Tools and Techniques of Environmental Law and Governance
- Conservation and Biodiversity
- o The Legal Challenges of Genetic Modification: Thinking Through the Issues
- Uncertainty and Risk Management: Exploring Novel Instruments in Land, Food and
- Integration of Special Rapporteurs Procedures Beyond the UN

Supporting Low-Carbon Energy Transitions 6/7/18 09.15/11.00 Venue: TIC Conference Room 7

Chair: Megan Bowman, Kings College London, UK

Carlos Soria-Rodríguez, Institute for European Studies (IES), Vrije Universiteit Brussel (VUB), Belgium, Marine Renewables Energies in Areas Beyond National Jurisdiction: Opportunities in a Sea of Legal Challenges

Shalini Iyengar and, Preeta Dhar, Srishti Institute of Art, Design and Technology, Bangalore, India, So(I)ar Pathways: Energy, Law and the Indian State of Play

Leslie-Anne Duvic-Paoli, King's College London, UK, An Inclusive Energy Transition? The Role of Public Participation in International Energy Governance

José Juan Gonzalez Marquez and, Ana Laura Silva, Metropolitan Autonomous University, Mexico, Energy Storage as key mechanism for energy transition in Mexico







Transboundary Water Governance

6/7/18 09.15/11.00 Venue: TIC Conference Room 2

Chair: Michael Kidd, University of KwaZulu-Natal, South Africa

Owen McIntyre, University College Cork, Getting to Grips with Land-Based Sources of Marine Pollution: The Challenge for International Watercourses Law

Christina Leb, World Bank, Data Innovations for Transboundary Freshwater Resources Management: Is the Obligation of Regular Data and Information Exchange still needed?

Flavia Rocha Loures, Xiamen University, China, Stepping up Transboundary Water Cooperation in a Hot Thirsty World: A Focus on Common Interests

Yang Liu, Ghent University, Belgium, Dealing with Hydropower Projects: The Protection of Transboundary Watercourses and the Right to a Healthy Environment in the Lancang/Mekong River Basin

Land Governance

6/7/18 09.15/11.00 Venue: TIC Conference Room 5

Chair: Lorenzo Cotula, International Institute for Environment and Development (IIED)

Marina Venâncio, Federal University of Santa Catarina, Florianopolis, Brazil, Agroecology, law and resilience

lan Hannam, Australian Centre for Agriculture and Law, University of New England, Australia, Governance of pastoral lands

Margherita Brunori, Università Statale di Milano, Italy, Global indicators for an equitable and secure access to land

Indrani Sigamany, Indigenous Land Rights, Oxford, UK, Social consequences of land rights legislation: gender and resilience

Technology and Environmental Law and Governance 6/7/18 09.15/11.00 Venue: TIC Conference Room 1

Chair: Heather McLeod-Kilmurray, Centre for Environmental Law and Global Sustainability, University of Ottawa, Canada

Willemien du Plessis and, Johan Nel, North-West University, South Africa, Selecting, adopting and using the most sustainable effective and efficient technologies -Expanding the South African legal framework

David Grinlinton, The University of Auckland, New Zealand, Legal Issues arising from advanced monitoring and surveillance for environmental compliance and enforcement

Stephen Turner, Lincoln University, UK, The role of technology in determining the standard of protection afforded by environmental rights

Katrien Steenmans, Coventry University, UK, and, Phillip Taylor (in absentia), University of Warwick, Coventry, UK, *Blockchain Technologies, Waste Management, and the Role of Law*

Protection of the Marine Environment and Species & Benefit-Sharing 6/7/18 09.15/11.00 Venue: TIC Conference Room 8

Chair: Elizabeth A. Kirk, Nottingham Trent University, UK

Amber Prasad Pant, Tribhuvan University, Kirtipur, Kathmandu, Nepal, Rights of the Landlocked Countries under Law of the Sea and Transit Agreements: A case study of Nepal

Leonardus Gerber, University of Pretoria, South Africa, Recent Developments in the Regulation of Deep Seabed Mineral Resources

Alana Malinde S N Lancaster, University of the West Indies, Cave Hill Campus, Barbados, Debt in Paradise: Are Debt for Climate Swaps a Viable Mechanism in the Adaptation and Mitigation Efforts in the CARICOM AND OECS Caribbean

Mara Ntona, Strathclyde Centre for Environmental Law and Governance, Integrated Coastal Zone Management Protocols to Regional Seas Conventions: New Avenues for Benefit-sharing from Coastal and Marine Resources

Indigenous innovation, Participation and resilience in biodiversity law and governance

6/7/18 09.15/11.00 Venue: TIC Conference Room 6

Chair: Rose-Liza Eisma Osorio, University of Cebu, Philippines

Alexander Solntsev, Department of International Law, People's Friendship University of Russia (RUDN-University, Moscow), *Genetic resources, traditional knowledge, indigenous people and principle of resilience*

Oluwatobiloba Moody, Center for International Governance Innovation, Waterloo, Canada, Balancing Risks and Benefits: Multilateralism and the Pursuit of Equity in the Distribution of Wealth Arising from Indigenous Innovation

Gift Dorothy Makanje, University of Malawi Law School, Malawi, Strengthening the role of traditional leaders for effective local community participation in environmental management in Malawi

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Natalie Stoianoff, Faculty of Law, University of Technology Sydney, Australia, Governance Principles for Indigenous Ecological Knowledge: The Garuwanga Project

Climate Change and Cities 6/7/18 09.15/11.00 Venue: Court Senate

Chair: Michael Mehling, Strathclyde Centre for Environmental Law and Governance

Jolene Lin, National University of Singapore, The Emergence of Urban Climate Law

Anél du Plessis, North-West University, South Africa, The Metabolism of the City and the Pursuit of Urban Climate Resilience

Nicholas Robinson, Pace University, New York, USA; Heline Sivini Ferreira, Pontifical Catholic University of Paraná (PUCPR), Curitiba, Brazil; and, Diogo Andreola Serraglio, Pontifical Catholic University of Paraná (PUCPR), Curitiba, Brazil, Climate Change Induced Migration and Urban Planning: a New Agenda for Sustainable Development

Svitlana Romanko, Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine, Climate Change Policies and Solutions for Resilient Cities in Ukraine, Eastern Europe and Central Asia: How Far From Paris Agreement?

Tools and Techniques of Environmental Law and Governance 6/7/18 09.15/11.00 Venue: Collins 201

Chair: Eloamaka Carol Okonkwo, Strathclyde Centre for Environmental Law and Governance

Linda Malone, Marshall Wythe School of Law at the College of William and Mary, USA, Prosecuting Wildlife Trafficking and Destruction of Antiquities Before the ICC as War Crimes

Maria Marquès Banqué, Tarragona Centre for Environmental Law Studies (CEDAT), Universitat Rovira I Virgili, Tarragona, Catalonia, Spain, *The role of technology and innovation in environmental crime*

Elodie Le Gal, School of Law, University of Aarhus, Aarhus, Denmark, *Drug pollution from manufacturing and antimicrobial resistance: How does the European Union manage the potential environmental and health risks of importing pharmaceutical active ingredients manufactured in third countries?*

Pierre Mazzega, CNRS, University of Toulouse, France; Claire Lajaunie, INSERM - Aix-Marseille University, France; Elisa Piccinini and; Camille Rohrbacher, Jean Jaurès University, Toulouse, France; Phillipe Muller and, Nathalie Gilles, Paul Sabatier University, Toulouse, France, Ocean Governance as seen through Multilateral Environmental Agreement

Conservation and Biodiversity

6/7/18 09.15/11.00 Venue: TIC Conference Room 4

Chair: Merachelle Rala Borracho, University of Cebu, Philippines

Claire Lajaunie, Aix-Marseille University, Aix en Provence, France, and, Pierre Mazzega, University of Toulouse, Toulouse, France, *On the Ethics of Integrative Research in Biodiversity Conservation*

Luis Henrique Braga Madalena and, Samantha Ribas Teixeira, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil, *The Brazilian Legal Policy on Environmental Education: An analysis of the measures adopted to promote biodiversity conservation prior to environmental damage*

Solange Teles da Silva, Presbyterian Mackenzie University Law School, São Paulo, Brazil and, Carolina Dutra (in absentia), Lawyer and Researcher in Environmental Law, São Paulo, Brazil, *Ecological solidarity, an innovative concept for biodiversity conservation policy*

Willem Daniel Lubbe, North-West University, South Africa, South Africa Conservation failing conservation: the elephant conundrum in Southern Africa

The Legal Challenges of Genetic Modification: Thinking Through the Issues (BTK 08) 6/7/18 09.15/11.00

Venue: TIC Conference Room 3

Chair: Paul Martin, Australian Centre for Agriculture and Law

Jonas Monast, University of North Carolina, Chapel Hill, USA, Editing Nature

Ngaya Munuo and, Rachel Wynberg (in absentia), University of Cape Town, South Africa, Rights-based Approaches to Transgene Contamination: Perspectives on Liability in South Africa

Davi Beltrao de Rossiter Correa and, Marcia Dieguez Leuzinger, University Centre of Brasilia, Brazil, International patent system of genetically modified seeds and national public welfare: courts activism and protection of local interests

Alena Kodolova, Saint Petersburg Scientific Research Center for Environmental Safety, Russian Academy of Science, Legal regulation of the use of genetically modified organisms in the field of export and import of agricultural products in the CIS: international and national aspects







Uncertainty and Risk Management: Exploring Novel Instruments in Land, Food and Agriculture

6/7/18 09.15/11.00 Venue: Insights Institute, Collins Building

Chair: Elsa Tsioumani, Strathclyde Centre for Environmental Law and Governance

Zen Makuch, Sustainability and Food Systems, Imperial College London, UK, Environmental and Climate Risk Strategies for an Un-Stationary Planet

Kate Devitt, Faculty of Science and Engineering, Faculty of Law and the Institute for Future Environments, Queensland University of Technology, *The liability of uncertainty: how mistrust in agricultural decision support technologies thwarts adoption*

Jonathan Verschuuren, Tilburg University, Netherlands, Towards an EU regulatory framework for climate smart agriculture: the example of soil carbon sequestration

Justine Bendel, University of Sheffield, UK, and, Giedre Jokubauskaite, Durham University, UK, Land-related obligations under the EIA

Integration of Special Rapporteurs Procedures Beyond the UN 6/7/18 09.15/11.00 Venue: TIC Lecture Theatre Level 1

(Session organized by the Global Network of Human Rights and the Environment)

Facilitators of this session include:

Sam Adelman, European Director of GNHRE; University of Warwick, UK.

Erin Daly, Director of GNHRE; Delaware Law School, USA

Louis Kotzé, North-West University, South Africa

Ole W Pedersen, Deputy Director of GNHRE; University of Newcastle, UK

Sara Seck, Deputy Director of GNHRE; Dalhousie University, Nova Scotia, Canada

11:00 - 11:30 Coffee break

11:30 – 13:00 Key Note speakers (Plenary)

Venue: TIC Main Auditorium

Chair: Robert Percival, University of Maryland Carey School of Law

<u>Joanne Scott</u>, Professor of European Law at the European University Institute, Fiesole, Italy, *The Global Reach of EU Environmental Law*

Geert Van Calster, Professor at the University of Leuven, Belgium, Even the price suits you, Sir! A critical view on innovation

13:00 - 14:15 Lunch and poster presentations

14:15 - 16:00 UN Special Rapporteurs Plenary (Chair: Alan Miller, Chair of Scotland First Minister's Human Rights Leadership Advisory Group)

Venue: TIC Main Auditorium

John Knox, UN Special Rapporteur on the environment and human rights, The Human Right to a Healthy Environment

Paul Hunt, Former UN Special Rapporteur on the right to the highest attainable standard of health, The environment and the mandate of the UN Special Rapporteur on the right to health

16:00 - 16:30 Coffee break

16:30 - 17:45 Conclusion

20:30 - 23.59 Colloquium Ceilidh (bookings for the ceilidh have closed and the event is now full)

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