

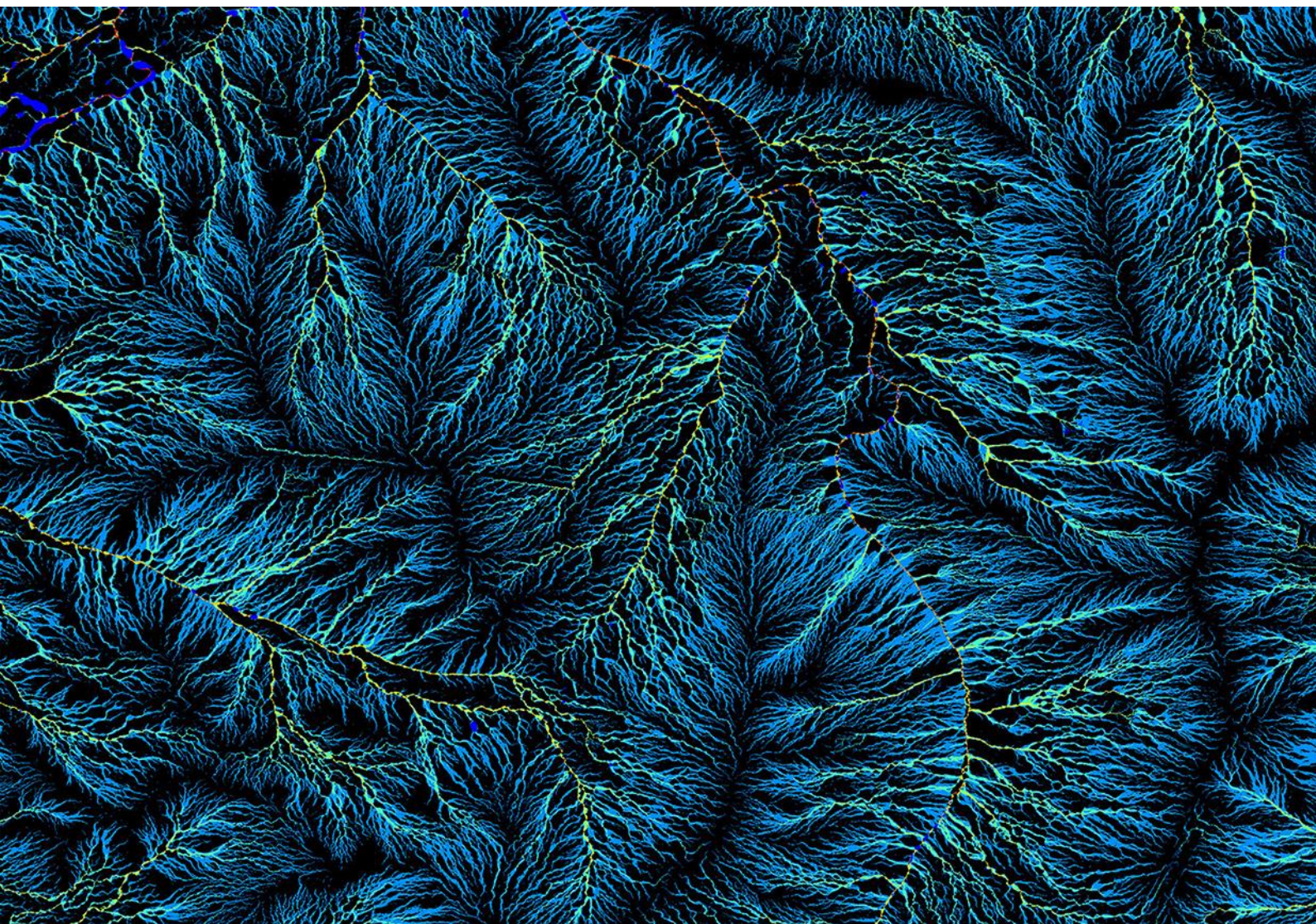


Australia's National
Science Agency

Keynote Presenters – Inaugural Annual Science Symposium hosted by Darwin Living Lab

You're invited to the inaugural science symposium. This year's theme is Urban Design and Heat Mitigation in the Tropics.

This December, leading experts from Australia and overseas will converge with the Darwin community and its practitioners. Attendees will exchange practical examples of, and scientific insights into, heat mitigation and climate-appropriate design for the dry tropics. We're inviting anyone interested in heat mitigation and urban design; from builders, architects, researchers, policy makers, developers, engineers, urban planners and other practitioners in related fields.



Duncan Challen

General Manager, Business Development, Celestino, Sydney Science Park



Duncan Challen

Duncan has proven international leadership leading diverse and complex businesses across multiple markets and countries in challenging business environments within the Private and Government sectors.

A global and future oriented leader with extensive international trade, industry and investment experience, having led the NSW Governments International Investment, Industry and Export organisations across 10 international markets, and significant multinational commercial expertise in building and managing sales and marketing businesses with for Shell across Asia Pacific, including having spent 3 years in China creating new Shell retail businesses with Chinese Joint Ventures across China.

Duncan has demonstrated successes in brokering collaborations between industry, government, universities, research institutions, start-ups and investors that create material and scalable commercial outcomes.

Duncan is now leading Celestino's business development for the \$5Billion Sydney Science Park greenfield development.

As Australia's national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.

CSIRO. Unlocking a better future for everyone.

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For further information

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Gilbert Rochecouste

Managing Director & Founder, Village Well



Gilbert Rochecouste

Gilbert is recognised locally and Internationally as a leading voice in Placemaking and the creation of vibrant, resilient and loved places. He is a sought-after speaker and skilled facilitator for community and stakeholder engagement activities and has worked with over 1000 cities, towns, mainstreets and communities over the past 25 years. Gilbert co-founded the EPOCH Foundation promoting the adoption of business ethics. He has been on the boards of Ross House, Donkey Wheel House Trust and Hub Australia. Gilbert leads a multi-disciplinary team of Placemakers, researchers and designers.

Project Highlights

- St Kilda Triangle Collaborative Design Process (Roots Projects Australia), 2015 – 2016.
- Longford Place Activation Plan (Northern Midlands Council), 2015.
- Jurien Bay Place Activation Community Engagement (Ardoss Group of Companies), 2015.
- Macquarie Point Place Vision and Activation Plan (Macquarie Point Development Corporation), 2014 – 2015.
- Monash University Place and Retail Vision (Monash University), 2014.
- Collins Court Place Story and Activation Concepts (Hobart City Council), 2014.
- ANU Community Engagement, Place Vision and Placemaking Strategy (ANU), 2014 – ongoing.
- Mathers Place Visioning (Hobart City Council), 2012.
- Rouse Hill Vision and Placemaking Strategy (GPT), 2005.
- Abbotsford Convent Vision, 1999.
- Flinders Lane & Degraes Street Activation and Place Vision, 1998.
- Creation of the Queen Victoria Summer Night Markets, 1996.

Dr Ido Nevat

Team Leader, Data Analytics Expert, TUMCREATE



Dr Ido Nevat

Dr Ido Nevat received the B.Sc. degree in electrical engineering from the Technion-Israel Institute of Technology, Haifa, Israel in 1998 and the Ph.D. degree in Electrical Engineering from the University of NSW, Sydney, Australia, in 2010. From 2010 to 2013 he was a postdoctoral research fellow with the Wireless and Networking Technologies Laboratory at CSIRO, Australia. From 2013 – 2016 he was a team leader at the Institute for Infocomm Research (I2R), Singapore. From 2017 Ido is with TUMCREATE, working at the Cooling Singapore Project.

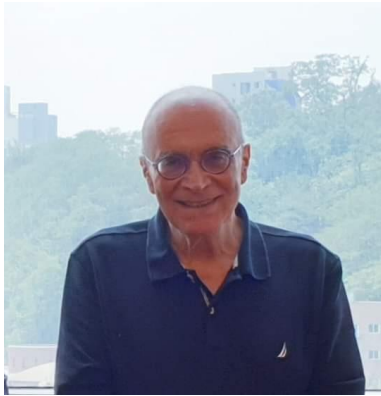
Research

Ido's research interests are theoretical and applied aspects of statistics and machine learning for environmental modelling. Ido develops new methods for making robust decisions in the presence of uncertainty, in order to assist decision makers, make informed policy decisions. Currently, Ido is investigating the following problems:

- How to quantify the UHI effect in the presence of climate model errors.
- How to make optimal urban design choices in order to improve outdoor thermal comfort.
- Investigating new methods for optimal resource allocation in order to improve quality of life related indices.

Mat Santamouris

Scientia Professor, School of Built Environment



Mat Santamouris

M. Santamouris is a Scientia Professor of High Performance Architecture at UNSW, and past Professor in the University of Athens, Greece. Visiting Professor: Cyprus Institute, Metropolitan University London, Tokyo Polytechnic University, Bolzano University, Brunel University and National University of Singapore. Past President of the National Center of Renewable and Energy Savings of Greece. Editor in Chief of the Energy and Buildings Journal, Past Editor in Chief of the Advances Building Energy Research, Associate Editor of the Solar Energy Journal and Member of the Editorial Board of 14 Journals. Editor of the Series of Books on Buildings, published by Earthscan Science Publishers. Editor and author of 14 international books published by Elsevier, Earthscan, Springer, etc. Author of 320 scientific articles published in journals. Reviewer of research projects in 29 countries including USA, UK, France, Germany, Canada, Sweden, etc.

Recent Publications

- Junsong Wang, Qinglin Meng, Lei Zhang, Yu Zhang, Bao-Jie He, Senlin Zheng, Mat Santamouris : Impacts of the water absorption capability on the evaporative cooling effect of previous paving materials, Building and Environment (2019), doi: <https://doi.org/10.1016/j.buildenv.2019.01.033>.
- Gihan Samarasinghe, Malgorzata Lagisz, Mattheos Santamouris, Komali Yenneti, Anir Kumar Upadgyay, Faustino De La Peña Suarez, Bhavesh Taunk, Shinichi Nakagawa : A visualized overview of systematic reviews and meta-analyses on low-carbon built environments: An evidence review map. Solar Energy 2019.
- 307 | Ilias Agathangelidis, Constantinos Catalis and Mat Santamouris : Integrating Urban Form, Function, and Energy Fluxes in Heat Exposure Indicator in View of Intra-Urban Heat Island Assessment and Climate Change Adaptation 208, Climate 2019, 7, 75; doi:10.3390/cli7060075.
- Prashant Anand, David Cheong, Chandra Sekhar, Mattheos Santamouris, Sekhar Kondepudi, Energy saving estimation for plug and lighting load using occupancy analysis, (2019), doi:10.1016/j.renene.2019.05.08.
- S.Karatasou and M.Santamouris : Socio-economic status and residential energy consumption: a latent variable approach. Energy and Buildings, Volume 198, 1 September 2019, Pages 100 – 105.
- Andri Pyrgou, Mattheos Santamouris and Iro Livada : Spatiotemporal Analysis of Diurnal Temperature Range: Effect of Urbanisation, Cloud Cover, Solar Radiation, and Precipitation, Climate 2019, 7, 89; doi:10.3390/cli7070089.

Riccardo Paolini

Senior Lecturer, Built Environment, University of NSW (UNSW)



Riccardo Paolini

Dr Riccardo Paolini holds a PhD in Building Systems Engineering from Politecnico di Milano and he's a Senior Lecturer in the High Performance Architecture research cluster, at the Faculty of Built Environment, University of New South Wales. His main research interests concern building physics and its applications to the design of building and urban envelopes, with a specific focus on the durability of building technologies to mitigate urban heat. These include the experimental assessment of the multi-year performance of green roofs and high albedo materials. Moreover, he investigated the uncertainty in the building energy performance as a result of the uncertainty in climate data. Riccardo participated in more than 30 interdisciplinary research projects, and published more than 60 studies in journal papers, book chapters and conference proceedings.

Tony Cox

Director, Clouston Associates



Tony Cox

Tony Cox is a Director of CLOUSTON Associates, having been a practicing Landscape Architect since 1986. Before joining CLOUSTON Associates in 1992, his professional career included experience in the public sector, large multi-disciplinary practices and as a sole practitioner. This has seen him conduct work in Sydney, Perth, Brisbane and England. He has been the Manager of CLOUSTON Associates in the Northern Territory since 1993.

Within CLOUSTON Associates, Tony has played a central role in a diverse range of planning, masterplanning and tourism projects undertaken across northern Australia, central Australia and South East Asia. His specialist expertise lies in his ability to draw out the core principles and distinguishing characteristics of any planning and design project. He brings to every project a planning/design ethos based on local 'language' and design integrity matched with the best practise environmental outcomes.

His ability to produce robust, inspirational documents is evident in the many awards afforded to CLOUSTON Associates and our clients. Most recently, the office has received design awards and a national sustainability award for its work on the Darwin International Airport and DEC/ Holiday Inn Forecourt. Often these awards and recognitions have been the result of intensive consultation that has effectively focussed community support and active participation.

Tony continues to be an active member of AILA at both territory and national levels. He has been a member of the AILA (NT) executive since 1992, including eight years as President. He is a past National President and was Chair of the Community and Environment Committee for 4 years. More recently, he has been a member of the NT Government Architects Expert Advisory Committee and was an expert panel member of Darwin City Tree Replacement Advisory Committee following the devastation of Cyclone Marcus.

Awards, Papers and Publications

- 'Greening & Cooling the City' - Initial heat mitigation paper prepared for NTG and City of Darwin, 2016
- 'Communities for Living' - Developing Northern Australia Conference, 2016
- 'Alice Outcomes' - My Park Rules National Competition (Special Jury Award), 2016

Selected Experience

- Darwin CBD Heat Mitigation and Landscape - Brief development, master planning and presentation drawings in conjunction with Government Architect
- Darwin CBD Streets Greening & Cooling The City - Masterplanning report for council & NTG
- Cavenagh Street Stages 1 & 2 - Street upgrades for greening & heat mitigation
- Bicentennial Park - Masterplan, implementation strategy and project briefs
- Maluka Views – Master Plan, Urban Design Guidelines and Public Realm Design
- Palmerston CBD Upgrades - Streetscape upgrades for pedestrians, cyclists and shade
- Darwin CBD Urban Forest - Issues, opportunities and feasibility of creating an urban forest
- Garramilla Boulevard - Masterplan, design and documentation of an innovative tropical urban boulevard as a new benchmark in street design and public amenity