

CAMPUS *mundi*

143

Bangkok is the capital and most populous city of Thailand. The Grand Palace and Buddhist temples, including Wat Arun and Wat Pho, stand in contrast with other tourist attractions. Bangkok is among the world's top tourist destinations and has been named the world's most visited city in several international rankings.

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www.aiu.edu

**AIU News + Essays + Education + Culture + Science + Technology
+ Art + Design + Health + Environment + Human Rights +
Animals & Nature + Change Management + About AIU**

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CHIEF OPERATION OFFICER
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choose
the contents
of this magazine
with you
in mind
-to inspire you
and make you
think

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your thoughts
with us!

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in touch

Outstanding achievements



AUGUST 12 2025. Atlantic International University proudly recognizes the outstanding

achievements of **Dr. Claudio Manuel de Rosa Ferreira**, Doctor of Economics graduate, whose decades-long career has shaped the economic and institutional landscape of Central America and inspired future leaders across the globe.

From the halls of the International Monetary Fund (IMF) to the negotiation tables

of historic reforms such as El Salvador's dollarization, **Dr. de Rosa's** influence has been felt in national governments, multilateral organizations, and the private sector. Over a remarkable career spanning five decades, he has advised presidents, central bank governors, finance ministers, and legislators, while also guiding critical anti-corruption initiatives and public policy transformations.

AIU's flexible, research-driven model played a pivotal role in advancing **Dr. de Rosa's** academic and professional journey. His doctoral studies

enabled him to synthesize decades of real-world policy work into rigorous academic frameworks, deepening his capacity to design innovative, interdisciplinary solutions to complex socioeconomic challenges.

"The AIU experience strengthened my ability to connect macroeconomic policy with human development, making my work more impactful for communities across Central America," said **Dr. de Rosa**.

A recognized thought leader, **Dr. de Rosa** has:

- Authored more than 600 published articles in leading economic and business publications.
- Served as Executive Director of the Salvadoran Banking Association (ABANSA) and Governor of the Latin American Federation of Banks (FELABAN).
- Led the Country Agreement Against Corruption initiative, uniting civil society and policymakers to create a shared vision for transparency.
- Been awarded the Distinguished Economist Award 2021 by the College of Professionals in Economic Sciences of El Salvador.
- Shaped public discourse through his role as researcher at the Public Policy Observatory of Francisco Gavidia University (OPP-UFG), producing highly cited reports on the Central American economy.

Beyond his policy influence, **Dr. de Rosa** is also a post-graduate professor and STEAM education advocate, training new generations to think critically, work collaboratively, and engage ethically in a digital economy. His international speaking engagements have brought his expertise to... **Read full text:** <https://www.aiu.edu/news/aiu-honors-dr-claudio-de-rosa-for-shaping-central-americas-economic-future/>

Book published



AUGUST 14 2025. We proudly congratulate our distinguished graduate, **Francisco Gallardo Pastore**,

on the publication of his new book, *Reduce Time and Costs in Your ISO 9001:2015*. This insightful guide offers organizations a practical roadmap to adapt, comply, and thrive under the latest requirements of the ISO 9001:2015 quality management standard.

With clarity and precision, **Gallardo Pastore** outlines the

essential steps for successful implementation of a Quality Management System (QMS). The book emphasizes identifying organizational gaps,



developing actionable implementation plans, conducting training and awareness programs, and ensuring long-term effectiveness.

One of the book's key contributions is its focus on risk-based thinking as a proactive strategy. Rather than viewing risk solely as a threat, **Gallardo Pastore** highlights its potential as a driver for growth, innovation, and continuous improvement. This fresh perspective positions organizations to not only prevent problems but also uncover new opportunities for advancement. ... **Read full text:** <https://www.aiu.edu/news/aiu-graduate-francisco-gallardo-pastore-has-published-a-book/>

We light a candle



AUGUST 18 2025. We are writing to inform you of the deeply regrettable news regarding the passing of **Mr. Kahisha Alidor Munemeka** on Tuesday, July 28, 2025, in Turkey. **Mr. Kahisha** was a dedicated student in the Doctor of Legal Studies program at **Atlantic International University** and graduated in December 2024.

Beyond his academic achievements, **Mr. Kahisha** also served as the Chief of

Staff to the Minister of Justice of the Democratic Republic of Congo (DRC).

His passing is a great loss for his family and the university community in the DRC. **Read text:** <https://www.aiu.edu/news/saddening-news-passing-of-mr-kahisha-alidor-munemeka/>



Image: www.freepik.as

16TH INTERNATIONAL CONFERENCE ON Health, Wellness & Society



Call for Papers

This Conference will be hosted
9–11 September 2026
by University of Guadalajara,
México.

We invite proposals for paper presentations, workshops/ interactive sessions, posters/ exhibits, colloquia, focused discussions, innovation show-cases, virtual posters, or virtual lightning talks.

2026 Special Focus:

“Nourishing Societies: Bridging Nutrition, Wellness, and Sustainability for a Healthier Future”

Theme 1: The Physiology,

Kinesiology, and Psychology of Wellness in its Social Context.

Theme 2: Interdisciplinary Health Sciences.

Theme 3: Public Health Policies and Practices.

Theme 4: Health Promotion and Education.

Become a Presenter:

1. Submit a proposal
2. Review timeline
3. Register

Advance proposal deadline

9 November 2025

Advance registration deadline

9 December 2025

Visit the website:

<https://healthandsociety.com>

Graduated with Distinction



DISTINCTION

Sylvester Sanyang

MASTER OF BUSINESS ADMINISTRATION
Business Administration

SEPTEMBER, 2025.

This graduate student completed his program with a high cumulative grade point average, which reflects the quality of performance within his major.

Congratulations!

19TH INTERNATIONAL CONFERENCE ON Inclusive Museum



Call for Papers

This Conference will be hosted
22–24 September 2026
by Chau Chak Wing Museum,
University of Sydney,
Sydney, Australia. +Online

We invite proposals for paper presentations, workshops/ interactive sessions, posters/ exhibits, colloquia, focused discussions, innovation show-cases, virtual posters, or virtual lightning talks.

2026 Special Focus: “The Future of Museum Narratives”

Theme 1: Visitors.

Theme 2: Collections.

Theme 3: Representations.

Become a Presenter:

1. Submit a proposal
2. Review timeline
3. Register

Advance proposal deadline

22 November 2025

Advance registration deadline

22 December 2025

Visit the website:

<https://onmuseums.com>

FIND MORE NEWS FROM AIU FAMILY

Latest News: <https://www.aiu.edu/aiu-news/>



Image: www.freepik.es

Graduates of the month

SEPTEMBER 2025

José Masuka
BACHELOR OF SCIENCE
Engineering Geology
ANGOLA

Gustavo Stella
BACHELOR OF PSYCHOLOGY
Cognitive Behavioral
ARGENTINA

Federico Martin Durbas
BACHELOR OF SCIENCE
Artificial Intelligence
ARGENTINA

Shadreck Batsile Modise
BACHELOR OF PSYCHOLOGY
Counselling
BOTSWANA

Onthusitse Maggie Rakole
DOCTOR OF BUSINESS ADMINISTRATION
Strategic Management and Leadership
BOTSWANA

Colette Njweng Suna
DOCTOR OF INTERNATIONAL RELATIONS
Diplomacy
CAMEROON

Onana Neme Blaise Joseph
DOCTOR OF SOCIAL AND HUMAN STUDIES
Social Policies
CAMEROON

Priyanka Kaur Hayre
BACHELOR OF SCIENCE
Physical Therapy
CANADA

Juan Fernando Arboleda Roldan
BACHELOR OF NUTRITION
Nutrition Science
COLOMBIA

Lamin P. Fofana
MASTER OF BUSINESS ADMINISTRATION
Accounting
CUBA

Omar Francisco Frias de la Cruz
MASTER OF ARCHITECTURE
Interior Distribution in Modern Architecture
DOMINICAN REPUBLIC

Rufino Esono Mangué
CERTIFICATE OF BUSINESS ADMINISTRATION
Business Negotiation
EQUATORIAL GUINEA

Emilia Feliciano S. De Sousa Gazola
BACHELOR OF SCIENCE
Social Science
GERMANY

Nichiren Tiruchellvam Pillai
DOCTOR OF SCIENCE
Public Health
GERMANY

Kwaku Adu-Boateng
DOCTOR OF PHILOSOPHY
Business Management
GHANA

José Samuel Monterroso Moscoso
POST-DOCTORATE OF SCIENCE
Energy Management and Energy Efficiency
GUATEMALA

Toyin Jibson Odidi
DOCTOR OF SOCIAL WORK
Social Work and Development
IRELAND

Kevin H. Francis
DOCTOR OF BUSINESS ADMINISTRATION
Business Administration
JAMAICA

Tracy-Ann Lynch
DOCTOR OF PHILOSOPHY
Educational Leadership
JAMAICA

Jhanoy A Nicholson
BACHELOR OF COMPUTER SCIENCE
Information Systems and Computer Science
JAMAICA

Colin Clifford Kerr
DOCTOR OF BUSINESS
Business Management
JAMAICA

George Okoth Onyango
DOCTOR OF SCIENCE
Electrical Engineering
KENYA

Joanne Chepchumba Mutai
DOCTOR OF INTERNATIONAL RELATIONS
International Relations
KENYA

Saul Davis Sango
BACHELOR OF SCIENCE
Data Analytics
KENYA

Luckheenaarain Trivedi
DOCTOR OF PHILOSOPHY
Civil and Environmental Engineering
MAURITIUS

Francisco Fernando Ruiz Torres
BACHELOR OF TRANSPERSONAL PSYCHOLOGY
Music Therapy
MEXICO

This month we have graduates from: Angola · Argentina · Botswana · Cameroon · Canada · Colombia · Cuba · Dominican Republic · Equatorial Guinea · Germany · Ghana · Guatemala · Ireland ·

<p>Guillermina Gonzalez Gomez BACHELOR OF PSYCHOLOGY Clinical and Organizational Psychology MEXICO</p> <p>Zara Itzel Chabur Gallo BACHELOR OF PSYCHOLOGY Psychotherapy and Development MEXICO</p> <p>Guillermina Gonzalez Gomez MASTER OF PSYCHOTHERAPY Clinical Psychology and Psychotherapy MEXICO</p> <p>Thamman Bahadur Budha Magar DOCTOR OF PHILOSOPHY Political Science NEPAL</p> <p>Bianca Damara Aguirre Zelaya BACHELOR OF SCIENCE Industrial Engineering NICARAGUA</p> <p>Sylvia Eberechukwu Idika DOCTOR OF PHILOSOPHY Business Administration NIGERIA</p> <p>Nnamdi George Friday DOCTOR OF PHILOSOPHY Leadership, Peacebuilding and Holistic Dev. NIGERIA</p> <p>Godwin David Maga Master of Business Administration Business Administration NIGERIA</p> <p>Udochukwu Onyeagba DOCTOR OF PHILOSOPHY Health and Human Services Management NIGERIA</p> <p>Usman Umar Bichi BACHELOR OF SCIENCE Water Resources Engineering NIGERIA</p>	<p>Efi, Uwhe Joshua DOCTOR OF PHILOSOPHY Food Chemistry and Toxicology NIGERIA</p> <p>Vivian Ogochukwu Obiadika MASTER OF SCIENCE Mining Engineering NIGERIA</p> <p>Dikko Dahiru Mangal DOCTOR OF BUSINESS ADMINISTRATION Business Administration NIGERIA</p> <p>Olafenwa Olubodunde Kehinde BACHELOR OF SCIENCE Architecture NIGERIA</p> <p>Uzoma Emilia Mmuogbo-Ejidike DOCTOR OF BUSINESS ADMINISTRATION Business Administration NIGERIA</p> <p>Iain Keith Riley DOCTOR OF EDUCATION Education PAKISTAN</p> <p>Oswaldo Julio Paz Exposito BACHELOR OF SCIENCE Industrial Engineering PANAMA</p> <p>Wilbert Afonso Ferreira BACHELOR OF BUSINESS ADMINISTRATION Strategic Management SAO TOME AND PRINCIPE</p> <p>Sylvester Sanyang MASTER OF BUSINESS ADMINISTRATION Business Administration THE GAMBIA</p> <p>Isabirye Mawazi BACHELOR OF ACCOUNTING Accounting UGANDA</p>	<p>Basemera Sandra DOCTOR OF PROJECT MANAGEMENT Project Monitoring and Evaluation UGANDA</p> <p>Ifeanyi Nicky Nwosu DOCTOR OF PHILOSOPHY Renewable Energy USA</p> <p>Mabibi Nzuau Juliana MASTER OF BUSINESS AND ECONOMICS Supply Chain Management USA</p>	<p>Luz Dary Moncayo Herrera BACHELOR OF BUSINESS ADMINISTRATION Business Management USA</p> <p>Fanny I. Goris DOCTOR OF HUMAN RESOURCES MANAGEMENT Human Resource Management USA</p> <p>Francis Sheka Kanu DOCTOR OF BUSINESS ADMINISTRATION Leadership and Organizational Development USA</p>	<p>Prudencia Anyizi Atabongakeng DOCTOR OF SPECIAL EDUCATION Science of Education USA</p> <p>Kevin Adrian Andrade Merelo BACHELOR OF SCIENCE Commercial Engineering USA</p> <p>FIND MORE GRADUATES Gallery / Interviews: https://www.aiu.edu/media-center/</p>

FIND MORE TESTIMONIALS FROM AIU STUDENTS HERE: <https://www.aiu.edu/aiu-testimonials/>



Guei Ounleu Gerard
Master of International Relations
July 18, 2025

“I have enrolled at **Atlantic International University** to pursue a Master’s degree in International Relations from 2021 to 2023. I already have a full-time job in another field and a family to support. However, one of my goals is to work in the field of diplomacy. One of the reasons I enrolled at **AIU** was that the university offered distance learning courses. This allowed me to continue my education while still working. Another reason was that the university offered tuition payment options in installments. It was a good experience for me to study at a distance university.

I also enrolled at **AIU** because of the choice I had to formulate my own program of study. I had already done some construction studies, so I wanted to avoid repeating the modules I had already taken. In addition, I wanted to design a curriculum that would help me have a broad understanding of the world. I chose subjects like international relations, diplomacy conflict management and negotiation, counselling skills, political science. ...

READ FULL TEXT: <https://www.aiu.edu/testimonials/guei-ounleu-gerard-master-of-international-relations-2/>



Majidadi Suleiman Muhammed
Master of Sustainable Urban Planning and Management
July 22, 2025

“Enrolling in **AIU** has been a transformative chapter in my personal, academic, and professional life. The flexibility and self-paced nature of the program allowed me to balance my academic pursuits with personal responsibilities, which was especially important to me as a working professional residing in Nigeria.

The **AIU** platform encouraged independent thinking, interdisciplinary learning, and a strong sense of ownership over my educational progress. The emphasis on applied learning and global relevance gave me the opportunity to explore complex urban sustainability issues from both local and international perspectives. The design of the curriculum allowing students to tailor their courses to their specific professional goals made my learning highly practical and deeply rewarding.

One of the most valuable aspects of my time at **AIU** was the ability to engage in critical research on vertical urban development, culminating in ...

READ FULL TEXT: <https://www.aiu.edu/testimonials/majidadi-suleiman-muhammed-master-of-sustainable-urban-planning-and-management/>



Olayeni Bisirodipe
Bachelor of Entrepreneurship
July 28, 2025

“First and foremost, every human being need to aspire in pursuing their aims in life. Without a dream, humans will be less-focused, less-productive, less-ambitious and aimless.

My journey at **Atlantic International University** started just like a dream, thus, appreciating my fruitful efforts in achieving my goal.

I had a great experience in this prestigious university. My tutor and advisor ensured I get things right at all cost. The communication is spontaneous. I do really appreciate them. The student service section is well amazing. It makes me feel at home even though I knew I am studying. The online library is also equipped with endless books, journals, articles with which I chose to make my study easier. The “Unplag”, I must commend this citadel of knowledge in making sure students excel in their course of studies. The Unplag is awesome in pin-pointing the areas needed for correction in my course work.

I enjoy my studies at **AIU**. I must say I learn so much than I expected even at my own pace and time. ...

READ FULL TEXT: <https://www.aiu.edu/testimonials/olayeni-bisirodipe-bachelor-of-entrepreneurship/>



Osegha Onodiana
Bachelor of Healthcare Administration
August 1, 2025

“My academic journey at **AIU** is indeed a milestone success. It was like a dream that could not be actualised at the beginning.

Through Mr. **Rene Condon** the admission advisor’s persuasion and encouragement, my spirit resonated and felt like entering with possibilities. I quickly discovered that University wasn’t just about education but it is about growth, resilience, and discovery my potential.

This academic journey was not an easy one for an adult like me who has a family of five to be working and schooling at the same time. There were financial and other challenges such as, balancing deadlines, navigating uncertainty, at times feeling overwhelmed and thinking of quitting the program. However, these experiences taught me resilience, and the importance of learning with the support of my family, siblings, lecturers, and friends.

Beyond classes, the **AIU** offered a vibrant community that allowed me to connect with like-minded individuals who are calling me for job through freelancing, develop new skills, and ...

READ FULL TEXT: <https://www.aiu.edu/testimonials/osegha-onodiana-bachelor-of-healthcare-administration/>

What is to be a human being

We live in a world where everything is talked about a lot, and we ask ourselves: what is true and what isn't? A world where everyone publishes in the media whatever they want to present as true. The big question is: in the face of so much talk; wouldn't the first thing we should do is know who we are so that, from there, we can build the world we need?

Much is written and spoken with half-truths and misinformation on a massive scale.

If we don't know who we are, what elements can we build the world we need?

Edgar Morin, a French philosopher and sociologist who, in this July 2025, is now 104 years old, tells us: "It is evident that we are, first and foremost, physical beings in a physical world, second, biological beings in a biological world, and finally, human beings in a society and a History". (MORIN, 2015. *TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION*, p. 94).

The big question is: why does the world live with a development of so-called hard sciences like Physics, Chemistry, Mathematics, and others? Why do we talk about soft sciences like Psychology, Sociology, and Philosophy?

Morin gives us this answer. "The human being is at once physical, biological, psychological, cultural, social, and historical. It is this complex unity of human nature that is completely disintegrated in disciplinary teaching, and

it has become impossible to teach what it means to be human". (MORIN, 2015. *TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION*, p. 104).

Why has teaching developed by forgetting the elements that make us up, where it would be easier to learn and achieve results that make us grow? The answer lies in the designation of hard sciences and soft sciences, because the pursuit of economic growth has been limited to a satisfactory life for human beings.

"In fact, Western well-being is identified with having a lot, while there is an opposition, often pointed out, between being and having". (MORIN, 2015. *TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION*, p. 24).

For a long time in History, researchers have been addressing the issue of having or being. In the topic, we have **Erich Fromm's** work *To Have or To Be?* published in 1978, which we now have in 2021, in a recent edition from *Fondo de Cultura Económica* at the *Paidós* Bookstore in Argentina. *Paidós* in Argentina is a bookstore, not the *Paidós* publishing house.

We have very important work on the change that science has undergone, which was

carried out with a so-called scientific method, the quantification method. "The approach through induction and deduction, which underpins both classical science and our ordinary way of understanding the world, is being questioned.

Popper showed the limits of induction, and **Udel's** theorem showed the limits of deduction. The evidentiary quality of rationality is no longer absolute". (MORIN, 2015. *TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION*, p. 32).

There is also **Prigogine's** work on dissipative structures, which are systems far from thermodynamic equilibrium that achieve self-organization through the energy and matter of their environment. **Prigogine** received the Nobel Prize in Chemistry in 1977 for the theory of dissipative structures.

We recently received a Nobel Prize for production that generates goods, as well as the Nobel Prize for Econom-



Image: www.freepik.es



By Dr. Rosa Hilda Lora M. Advisor at AIU | rosa@aiu.edu

ics in 2024. In 2024, it was awarded to **Daron Acemoglu**, **Simon Johnson**, and **James A. Robinson** for their work on the influence of the type of institutions a society has; if there is legality, there is well-being because it is a mandatory space for others.

Nowadays we have methods that use quantification and qualification; what we continue to do is science and teaching to produce goods.

What today's society shows us is that money matters more than the quality of human life.

Morin says: "Living is learned through one's own experiences, with the help of parents first and then educators, but also through books, poetry, and encounters. Living is living as an individual facing the problems of one's personal life; it is living as a citizen of one's nation; it is also living in one's belonging to humanity. Without a doubt, reading, writing, and counting are necessary for living". (*MORIN, 2015. TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION, p. 15*).

This is what our society lacks; we teach to produce goods and to have them in a frenzy that stimulates the senses and emotions so that people buy and buy. The Humanities leave nothing rich, and we see students seeking out the disciplines that gen-

erate the most money.

That's why **Morin** says: "The teaching of literature, history, mathematics, and science contributes to integration into social life; the teaching of literature is very useful because it develops both sensitivity and knowledge; the teaching of philosophy stimulates the capacity for reflection in every reflective mind, and, without a doubt, specialized teaching is necessary in professional life". (*MORIN, 2015. TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION, p. 15*).

We are witnessing the way in which previous disciplines are being eliminated, their content replaced by ideologies that contribute to the governments of the production of goods, regardless of where we are headed as human beings. Life nowadays is uncertain as to where it's headed.

Everything is conflict, conflicts generated by the prevailing misinformation. That's why **Morin** says: "Living is an adventure that carries with it ever-renewed uncertainties, eventually with personal or collective crises or catastrophes. Living means constantly facing uncertainty, even in the only certainty of our death, the date of which, however, we don't know. We don't know where and when we will be happy or unhappy,

EKONOMIPRISET 2024
THE PRIZE IN ECONOMIC SCIENCES 2024

Daron Acemoglu
Massachusetts Institute of Technology, USA

Simon Johnson
Massachusetts Institute of Technology, USA

James A. Robinson
University of Chicago, IL, USA

"för studier av hur institutioner formas och påverkar välbstånd"
"for studies of how institutions are formed and affect prosperity"

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THE NOBEL PRIZE

Nobel Prizes in Economics 2024

we don't know what illnesses we will suffer, we don't know our happiness and misfortunes in advance. Furthermore, we have entered a great era of uncertainty about our futures, that of our families, that of our society, that of globalized humanity". (*MORIN, 2015. TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION, p. 21*).

We live in a society that cares little about life; if we earn money, nothing else concerns us. We are witnesses to this rush toward money and witnesses to the consequences that grow every day; every day the needs of those who have the least increase.

That is why **Morin** says:

"It is necessary to obey the preceptor's command in **Jean Jacques Rousseau's Emile**: 'teach how to live.' Undoubtedly, there are no recipes for life. But we can teach how to link knowledge to life. We can teach how to develop maximum autonomy and, as **Descartes** would say, a method for properly guiding one's spirit that allows one to personally confront the problems of living. And we can teach each and everyone what helps avoid life's permanent pitfalls". (*MORIN, 2015. TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION, p. 22*).

This teaching of how to live nowadays is based on misin-

formation and the use of what could be good, such as Artificial Intelligence (AI), which, since it has not been fully regulated, is used to create needs that harm a large part of the population.

The United Nations is working hard to ensure that it can be regulated in a way that generates peace. "However, until now, the benefits of AI are distributed unequally, concentrated in a few powerful companies and countries. As United Nations Secretary-General **António Guterres** recently stated, many nations struggle to access artificial intelligence tools, highlighting the need for international cooperation

and solidarity to close the AI gap in developing countries”.

UN – PEACE, DIGNITY AND EQUALITY ON A HEALTHY PLANET. <https://www.un.org/es/global-issues/artificial-intelligence>

AI could greatly contribute to creating a sustainable world with opportunities for all, but we are witnessing that this is not the case; it is used by powerful groups to maintain it.

“While artificial intelligence has the potential to address some of the greatest global challenges —such as driving economic growth and social transformation— the rapid advancement of this emerging technology inevitably brings with it a series of risks and challenges, including threats to the accuracy of information and human rights”. UN – PEACE, DIGNITY AND EQUALITY ON A HEALTHY PLANET. <https://www.un.org/en/global-issues/artificial-intelligence>

In response to the difficulties, the UN has created a body of experts. “For this reason, the UN Secretary-General has established the High-Level Advisory Body on Artificial Intelligence. This group of experts analyzes the current situation and recommends strategies for international governance, taking an integrative and comprehensive approach. Composed of up to 39 experts from various disciplines, the Body aims to align AI governance with human rights and the Sustainable



Development Goals. To ensure a collaborative approach, it works with diverse stakeholder groups, including governments, the private sector, and civil society”. UN – PEACE, DIGNITY AND EQUALITY ON A HEALTHY PLANET. <https://www.un.org/en/global-issues/artificial-intelligence>

Constant and efficient work can create the world we desperately need, which is why **Morin** says: “All progress over the unknown, every process of adaptation to the environment and the adaptation of the environment to itself, begins from the moment we come into the world through trial and error and will continue not only in childhood and adolescence but throughout life. An ignored error is as harmful as an error recognized, analyzed, and overcome is positive”. (MORIN, 2015. *TEACHING TO LIVE. MANIFESTO FOR CHANGING EDUCATION*, p. 78).

Of Artificial Intelligence, **Morin** says: “AI can be scary, but I fear superficial human intelligence above all.” This expression is the result of the interview conducted on his 104th birthday, this July 8, 2025. <https://www.elmundo.es/papel/el-mundo-que-viene/2025/08/03/6888eaobe4d4d829338b45bb.html>
Also, at: http://www.elmundo.es/papel/el-mundo-que-viene/2025/08/03/6888eaobe4d4d829338b45bb.html?utm_term=Autofeed&utm_medium=Social&utm_source=Twitter#Echobox=1754227665

You are in this world with the characteristics of a human being. What must you do to achieve your fulfillment?

It seems you must recognize that the social order we have place a lot of importance on disinformation and hate speech and that it seeks every possible means for, as is the case, the use that is often given to AI.

You also know that education is geared toward making money and that it matters little to the development of who we are as human beings.

As human beings, whether we like it or not, we simultaneously possess physical, biological, psychological, cultural, social, and historical qualities, so we can’t base our lives solely on acquiring goods.

You are studying at **Atlantic International University (AIU)**, where they require you to study for your development, based on your human condition. Hence the assignments that often pose the question: What’s the point of this if I’m doing a program based on the so-called hard sciences? Why do I read this book that looks like History? Why read this book or do this assignment that looks like Psychology?

By developing the elements that make you who you are, human being, you can achieve your well-being.

Study so that everything we are witnessing is a historical situation that you can understand and find your means to realize what you are —a human being.

Research, complete the assignment they ask you to do so you know the reasons and can contribute to creating the world we need.

Take care to love others it’s the word we have for everyone.

Keep in mind that life is made of periods of well-being that are built, and one appears and the next comes.

We don’t live in and endless heaven or disaster: we gradually build what allows us to be well.

Take advantage of the opportunity you must study to find out who you are and where you want to go.

BIBLIOGRAPHY. Fromm, E. 2021. ¿Tener o Ser? Fondo de Cultura Económica. Argentina. | **Morin E.** 2015. Enseñar a vivir. Manifiesto para cambiar la educación. | Argentina. Ediciones Nueva Visión. Original en francés. | **Morin E.** 2015. Enseñar a vivir. Manifiesto para cambiar la educación. <https://edgar-morinmultiversidad.org/images/PDF/Ensenar-a-vivir.pdf> | **Morin. E.** “La IA puede dar miedo, pero yo temo sobre todo a la inteligencia humana superficial”. <https://www.elmundo.es/papel/el-mundo-que-viene/2025/08/03/6888eaobe4d4d829338b45bb.html> | **El Mundo.** El mundo que viene. www.elmundo.es/papel/el-mundo-que-viene/2025/08/03/6888eaobe4d4d829338b45bb.html?utm_term=Autofeed&utm_medium=Social&utm_source=Twitter#Echobox=1754227665 | **ONU-** Paz, Dignidad e Igualdad en un planeta sano. <https://www.un.org/es/global-issues/artificial-intelligence>

A comprehensive approach on the production of selected cereal grain crops

Masimba Gwemende | Doctorate In Agricultural Science | Part 1/2 of condensed Academic Article

Introduction:

Global food security has become one of the most pressing challenges of the twenty-first century. Population growth, environmental degradation, and climate change are converging to create a complex crisis in food systems. The world's population is projected to surpass 9.5 billion by 2050, with much of this growth concentrated in regions already struggling with poverty, malnutrition, and limited agricultural productivity. Ensuring an adequate, stable, and nutritious food supply under these conditions requires not only greater productivity but also more resilient agricultural systems.

Among the vast array of crops cultivated worldwide, cereals occupy a preeminent place. They account for the majority of caloric intake for humans, are central to livestock feeding systems, and provide raw material for a wide range of industrial products. Maize, rice, and wheat together supply more than half of the

calories consumed globally, while other cereals such as barley, sorghum, oats, rye, and the millets play critical roles in specific regions. These crops have underpinned the rise of civilizations, shaped global trade networks, and continue

to serve as the backbone of agricultural economies.

Yet the prominence of cereals brings vulnerability. Heavy reliance on just three species—maize, rice, and wheat—concentrates risk in the face of climate instability, pests,

and diseases. Moreover, cereal production systems are often input-intensive, dependent on fertilizers, irrigation, and fossil fuels, raising concerns of sustainability. In this context, the so-called “minor cereals,” including sorghum, pearl

millet, finger millet, rye, oats, and triticale, have renewed relevance. These crops frequently demonstrate tolerance to harsh conditions such as drought, poor soils, and cold climates, offering alternatives and complements to the dominant grains.

This condensed article synthesizes a much larger dissertation of more than 43,000 words into a scholarly overview of approximately 5,000–6,000 words. The goal is to present the essential agronomic, ecological, and socio-economic dimensions of the main cereal crops, highlighting both their global importance and their local significance. The structure follows a logical progression: first, a discussion of the general characteristics of cereals as a crop group; then crop-by-crop summaries of maize, sorghum, barley, pearl millet, finger millet, oats, rye, triticale, rice, and wheat; followed by a cross-cutting discussion of themes such as food



Image: www.freepik.es

security, climate resilience, and sustainability; and finally a conclusion that reflects on the collective role of cereals in shaping humanity's future.

This synthesis is intended for scholars, practitioners, and policymakers who require an accessible yet academically rigorous overview of cereal crop production. By condensing the information into a continuous narrative rather than a set of discrete chapters, the article emphasizes connections across crops, contexts, and challenges, while retaining enough detail to reflect the complexity of each cereal's agronomy and role in society.

General characteristics of cereal crops

Cereal crops are members of the Poaceae, or grass family, a large botanical group that includes thousands of species, of which only a few have been domesticated for food. The defining feature of cereals is the production of small, dry, one-seeded fruits known as caryopses, in which the seed coat is fused with the ovary wall. This structure, coupled with high concentrations of starch, makes cereals an efficient source of dietary energy.

The morphology of cereal plants is broadly similar: fibrous root systems that allow for efficient water and nutri-

ent uptake; hollow stems with nodes that provide structural support; narrow, elongated leaves with parallel venation; and flowers arranged in inflorescences such as panicles, spikes, or racemes. Most cereals are annuals, completing their life cycle within one growing season. Their physiology tends toward high productivity under favorable conditions, which has made them the primary targets of both ancient domestication and modern plant breeding.

Nutritionally, cereals are rich in carbohydrates, which typically constitute 60–80 percent of grain weight. Protein content varies, with wheat containing 10–15 percent, maize around 8–10 percent, and millets and sorghum comparable. Oil content is generally low, usually below 5 percent, though maize germ can reach higher levels. Micronutrient content varies by species, with millets often surpassing major cereals in iron, zinc, and calcium. However, cereals are sometimes deficient in essential amino acids such as lysine, which has shaped dietary patterns where cereals dominate.

Agronomically, cereals demonstrate remarkable ecological adaptability. Rice thrives in flooded lowlands with abundant water, while sorghum and millets excel in semi-arid

zones with as little as 200–400 millimeters of annual rainfall. Barley and rye tolerate cold and nutrient-poor soils, oats perform best in temperate, moist conditions, and maize yields abundantly in fertile soils with adequate rainfall or irrigation. This breadth of adaptation explains why cereals collectively are grown on more land than any other crop group, spanning nearly every inhabited continent and agro-ecological zone.

Cereals are not merely biological organisms but cultural artifacts. Their domestication represents a pivotal moment in human history, enabling sedentary societies, surplus production, and the rise of cities and states. They have shaped cuisines, economies, and identities: wheat bread in Europe, rice in Asia, maize in the Americas, and sorghum and millet in Africa. Today, their role extends to livestock feeding, brewing, biofuel production, and a variety of industrial uses, demonstrating their versatility and indispensability.

At the same time, cereal production faces challenges. The heavy reliance on chemical inputs raises concerns about soil degradation, water pollution, and greenhouse gas emissions. Climate change threatens yields through increased frequency of droughts, floods, and pest outbreaks. Genetic erosion, as

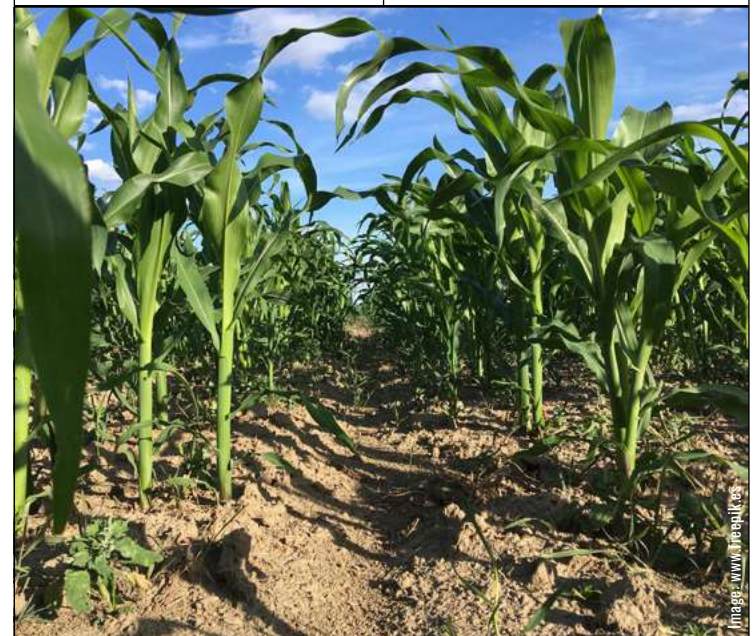
traditional landraces give way to modern varieties, reduces resilience. Addressing these issues requires a nuanced approach that balances productivity with sustainability, diversity with efficiency, and global trade with local food security.

Maize (*Zea mays*)

Maize, also known as corn, is the most widely produced cereal in the world, with global annual production surpassing one billion metric tons. It originated in Central America, where it was domesticated approximately 9,000 years ago from a wild grass known as teosinte. From its birthplace, maize spread rapidly across the Americas, and following

the Columbian exchange in the sixteenth century, it was introduced to Europe, Africa, and Asia, where it became a staple crop. Today, maize is cultivated in diverse environments ranging from temperate plains in the United States to highland regions in East Africa and semi-arid zones in southern Africa.

The versatility of maize underpins its global significance. In many developing countries, particularly in Africa and Latin America, maize is a staple food consumed directly as flour, porridge, tortillas, and other traditional preparations. In industrialized nations, the majority of maize is used as livestock feed, supporting





intensive poultry, swine, and dairy systems. Beyond food and feed, maize serves as raw material for starch, corn syrup, ethanol, and a wide range of industrial products, making it an economic powerhouse.

Nutritionally, maize grain consists of about 70–80 percent starch, 8–10 percent protein, and 3–5 percent oil. The protein quality is limited by low lysine and tryptophan content, but biofortified varieties such as Quality Protein Maize (QPM) have been developed to address this deficiency. Maize also provides dietary fiber, B vitamins, and small amounts of miner-

als. Its nutritional contribution varies by context: in subsistence farming communities it provides daily sustenance, while in industrial economies it indirectly contributes to diets through animal products and processed foods.

Agronomically, maize requires warm conditions, with optimal growth at temperatures between 21–30°C. It is moderately sensitive to drought, particularly during flowering and grain filling, but modern breeding has produced varieties with improved drought tolerance. Rainfall of 500–800 millimeters per

season is generally adequate, though irrigation enhances yields in dry regions. Maize thrives in fertile, well-drained soils, particularly those rich in organic matter and nitrogen.

Management practices are crucial for achieving high yields. Hybrid cultivars dominate in commercial systems, offering heterosis that boosts productivity. Planting density varies depending on rainfall and soil fertility, with closer spacing in irrigated systems. Fertilization focuses on nitrogen, phosphorus, and potassium, applied at critical growth stages. Integrated pest man-

agement is essential, as maize is vulnerable to pests such as stem borers, armyworms, and fall armyworm, as well as diseases like maize streak virus. Weeds must be controlled early to reduce competition.

Harvesting occurs when kernels reach physiological maturity, typically indicated by a black layer at the base of the grain. Delays in harvesting expose the crop to lodging, pests, and aflatoxin contamination. Post-harvest handling includes shelling, drying, and storage in pest-proof containers or silos. Losses during this stage can be significant in smallholder systems, where inadequate storage exposes grain to insects and mold.

Maize’s global prominence, however, comes with sustainability challenges. The crop is resource-intensive, often requiring high fertilizer and pesticide inputs, and is sensitive to climate extremes. Its role in biofuel production has sparked debates about food versus fuel, as large-scale ethanol production in the United States and elsewhere diverts grain from food markets. Nonetheless, maize remains indispensable, and innovations in breeding, management, and post-harvest systems will determine how effectively it contributes to global food security in the decades ahead.

Sorghum (*Sorghum bicolor*)

Sorghum is the fifth most important cereal worldwide in terms of production and area cultivated, but it is arguably the most resilient of all. Indigenous to Africa, sorghum has been cultivated for thousands of years and remains a staple for millions of people in semi-arid regions of Africa and Asia. Its ability to withstand high temperatures and low rainfall makes it a lifeline in environments where other cereals cannot survive.

The uses of sorghum are diverse. In human diets, sorghum is consumed as porridge, flatbreads, couscous-like preparations, and fermented products. It is also used in brewing traditional and commercial beers, as well as in syrup production. In livestock systems, both the grain and the stalks are valuable: grain provides concentrated feed, while stalks serve as fodder or fuel. Industrial applications, though smaller in scale, include starch and ethanol production.

Nutritionally, sorghum is comparable to maize in carbohydrate and protein content, though its proteins are less digestible due to the presence of tannins and kafirin proteins. However, tannin-free varieties have improved digestibility, and sorghum provides valuable

micronutrients and dietary fiber. Its gluten-free nature has also sparked interest in developed countries as an alternative grain for individuals with celiac disease or gluten intolerance.

Ecologically, sorghum is unparalleled in its drought resistance. It can produce reasonable yields with as little as 400 millimeters of rainfall and in soils with limited fertility. Its deep root system, waxy leaf cuticle, and ability to temporarily suspend growth under stress contribute to its resilience. Sorghum is also more tolerant of salinity and waterlogging than many cereals, broadening its adaptability.

Management practices for sorghum emphasize low-input resilience. Cultivar selection focuses on maturity length suited to rainfall patterns, as well as resistance to diseases such as anthracnose, smut, and downy mildew. Planting coincides with the onset of rains in semi-arid regions, and minimal fertilization is applied, though moderate nitrogen and phosphorus can enhance yields. Weed control is essential during early growth, but once established, sorghum competes well. Pests such as shoot flies, stem borers, and midge are threats, but integrated pest management strategies help mitigate damage.

Harvesting sorghum requires care, as the crop is susceptible to bird predation and lodging. Grain should be harvested when fully mature and dried promptly to prevent mold and pest infestation. Post-harvest losses are common in traditional storage, highlighting the need for improved facilities. Despite these challenges, sorghum's low input requirements and high adaptability make it an attractive crop for smallholder farmers.

In the broader context, sorghum's resilience positions it as a climate-smart crop for the future. As global temperatures rise and rainfall becomes more erratic, crops that can produce

under stress will be increasingly vital. Moreover, sorghum's multiple uses across food, feed, and industry enhance its economic potential. Investments in breeding for higher yields, better nutritional quality, and resistance to emerging pests will ensure that sorghum remains a cornerstone of food security in the world's most vulnerable regions.

Barley (*Hordeum vulgare*)

Barley is one of the oldest domesticated cereals, with evidence of its cultivation dating back more than 10,000 years in the Fertile Crescent. Its adaptability and versatility ensured its survival as a major crop

across centuries, and today it ranks among the most widely grown cereals worldwide. Barley has long been valued both as food and as a raw material for beverages, with its role in malting and brewing making it particularly significant in global trade.

Barley is cultivated extensively in temperate regions of Europe, North America, and Asia. Unlike maize or rice, which demand fertile soils and substantial water, barley thrives under relatively harsh conditions. It tolerates poor, sandy, or saline soils and grows successfully with limited rainfall, often as low as 250-300 millimeters annually. Its ability to mature quickly under cool conditions also makes it suitable for high-altitude and northern climates where other cereals would fail.

The uses of barley are diverse. Historically, it was a staple food in many societies, consumed as porridge, bread, and soups. While its importance in direct human consumption has declined in industrialized economies, it remains significant in traditional diets in North Africa, parts of the Middle East, and mountainous regions of Asia. The largest share of global barley production today is used for animal feed, especially for cattle, sheep, and horses. Per-

haps the most distinctive use of barley is in malting, which underpins the brewing and distilling industries. Malting requires grains with specific enzymatic properties, and the high demand for malt barley in beer production continues to drive its cultivation.

Nutritionally, barley grain contains 60-65 percent starch, 10-12 percent protein, and about 2 percent fat. It is a good source of dietary fiber, particularly beta-glucans, which have recognized health benefits in reducing cholesterol and improving digestion. Whole grain barley is increasingly promoted as a health food in developed countries, though its use remains overshadowed by wheat and rice.

Agronomically, barley performs best in cool climates with temperatures between 15-20°C during the growing season. It is less demanding than wheat in soil fertility but responds well to nitrogen and phosphorus fertilizers. Modern breeding has focused on improving resistance to diseases such as powdery mildew, rusts, and barley yellow dwarf virus. Early sowing and balanced fertilization enhance yields, while integrated pest management is required to minimize losses.

Harvesting barley requires careful timing, as delays can lead to lodging or loss



of malting quality. Grain moisture content must be reduced to safe storage levels to prevent spoilage. In regions where barley is grown as animal feed, straw is also an important by-product, valued as livestock fodder.

Barley’s enduring importance lies not only in its adaptability but also in its cultural and industrial roles. As climate change alters rainfall patterns and increases temperature variability, barley’s resilience will ensure its continued relevance. Moreover, its nutritional qualities and potential in health-oriented markets may renew its role in direct human consumption, complementing its established position in animal feeding and brewing industries.

Pearl millet
(Pennisetum glaucum)

Pearl millet, sometimes referred to simply as millet, is a cereal of immense significance in the dryland regions of Africa and India. It is among the most drought-tolerant cereal crops, capable of producing harvests in conditions that defeat maize, wheat, or rice. For millions of smallholder farmers in semi-arid areas, pearl millet is a vital staple, both nutritionally and culturally.

Cultivated for more than 4,000 years, pearl millet originated in the Sahel region of



Africa before spreading to India and beyond. Today, it remains a mainstay of farming systems in sub-Saharan Africa, particularly in Niger, Mali, and Nigeria, and in the Indian states of Rajasthan and Gujarat. Its ecological resilience explains its distribution: pearl millet grows in sandy, infertile soils and can produce yields with as little as 200–300 millimeters of annual rainfall. It also withstands high temperatures exceeding 40°C.

Nutritionally, pearl millet is a powerhouse compared to many other cereals. It contains 8–12 percent protein, 60–70 percent carbohydrates, and 5–7

percent fat, along with high levels of iron, zinc, and other micronutrients. Its protein digestibility and amino acid balance are superior to that of sorghum, and its calcium content is noteworthy among cereals. For populations vulnerable to malnutrition, pearl millet provides essential nutrients that help combat anemia and micronutrient deficiencies.

In human diets, pearl millet is consumed in a variety of forms: ground into flour for flatbreads such as rotis in India, boiled into porridges in Africa, or fermented into beverages. Its ability to ferment

readily makes it suitable for traditional foods with extended shelf life. The crop’s stalks serve as fodder for livestock, further enhancing its role in mixed farming systems.

Agronomically, pearl millet’s short growth cycle—often just 70–90 days—makes it well suited to regions with brief and erratic rainy seasons. Early sowing at the onset of rains is essential to maximize productivity. Fertilizer requirements are low, though modest applications of nitrogen and phosphorus significantly

increase yields. Weed competition can be severe, so timely weeding during the first month of growth is critical. Pests such as stem borers, shoot flies, and downy mildew are threats, but resilient landraces and improved varieties help mitigate these problems.

Harvesting pearl millet involves cutting panicles when grains are hard but before shattering occurs. Post-harvest practices include drying and threshing, followed by storage in sealed containers or underground pits to protect against insects and moisture. Inadequate storage is a persistent challenge in many regions, leading to post-harvest losses.

Pearl millet’s significance extends beyond its agronomy and nutrition. It is embedded in cultural traditions, particularly in India, where it is celebrated in local cuisines and festivals. As global interest in “climate-smart” crops grows, pearl millet is gaining recognition for its resilience and nutritional value. International initiatives are now promoting its wider adoption, not only in traditional regions but also in areas seeking alternatives to water- and input-intensive cereals.

TO BE CONTINUED

Publications by Students: aiu.edu/StudentPublication.html



learning



Image: AP Photo / David Zalubowski

ND students

Helping each other build more inclusive schools.

Having autism and ADHD, engineering student **Tory Ridgeway** already knew there were plenty of others like him. But he hadn't realized they shared the same negative self-talk. He said he locked into focus when he heard *The Neurodiversity Alliance* President **Jesse Sanchez** describe overcoming feelings of being a "defective toy."

"They talking to me," **Ridgeway** said. "I felt seen. I felt heard. And I'm gonna try to recreate this feeling wherever I go now."

A peer-to-peer movement of high school and college students is hitting campuses this fall to foster that same sense of liberation among their fellow neurodivergent classmates, whose brains function differently from what is considered typical. Known as *The Neurodiversity Alliance*, they've increased

the number of schools reached from 60 to more than 600 in the past year.

Building on the visibility that followed rising diagnoses and pandemic-era awareness, the alliance says it empowers youth to build more inclusive spaces together. In early August, more than 130 students took up that mantle at a Denver summit. They exchanged recruitment tactics, asked professionals about navigating "neurotypical" work cultures and named their favorite neurodiverse fictional characters. Throughout the week's sessions, many stilled — making repetitive movements to self-soothe — by building LEGO blocks, braiding yarn or using fidgets. ...

Read full text at Associated Press: <https://apnews.com/article/neurodiversity-alliance-autism-adhd-dyslexia-15bdbb49ce538a60562a2adc7a2d86ae>

Indigenous knowledge

Communities already have the solutions.

In 2020, while writing her PhD dissertation on bringing land-restoration efforts in urban settings in Seattle under the management of Indigenous peoples, the Indigenous scientist **Jessica Hernandez** noticed that many of the articles and books she wanted to incorporate were not written by Indigenous people. Moreover, those that were were often not written in English.

She wrote her first book, *Fresh Banana Leaves* (2022), as a way to help Indigenous peoples feel represented and to integrate Indigenous knowledge into scientific research. The book ... highlights Indigenous science, stewardship and land management, and particularly projects led by Indigenous women. ...

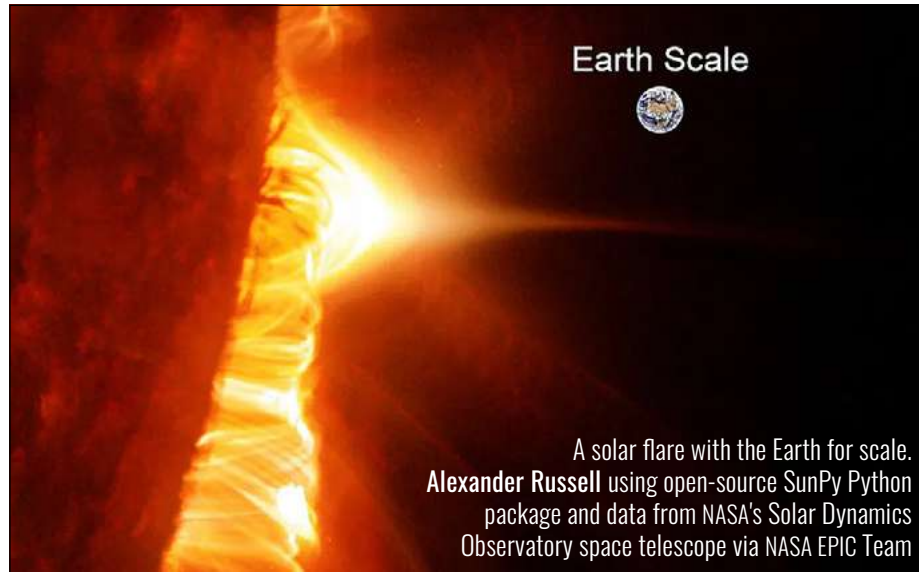
Hernandez's heritage is both Maya Ch'orti', an Indigenous Maya group,

and Binnizá (Zapotec), an Indigenous people from the Mexican state of Oaxaca. She currently teaches environmental studies at South Seattle College in Washington. Her research focuses on integrating Indigenous knowledge systems — such as kincentric ecology, the concept that all life is interconnected as kin — into restoration and conservation frameworks, and on pushing back against colonialism in ecological efforts. Her work also aims to redefine how the topic of energy is taught in secondary-school curricula, going beyond the physics of it by incorporating concepts of equity, justice and Indigenous knowledge as they are applied to energy access, climate change and sustainability. ... **Read full text at Nature:** <https://www.nature.com/articles/d41586-025-02654-z>



Image: Jayne Doucette/Woods Hole Oceanographic Institution

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A solar flare with the Earth for scale. Alexander Russell using open-source SunPy Python package and data from NASA's Solar Dynamics Observatory space telescope via NASA EPIC Team

Solar flares

May be way hotter than researchers previously thought.

Solar flares —intense releases of electromagnetic radiation into the sun’s atmosphere— could be more than six times hotter than solar physicists previously believed.

These stunning events involve two particles: electrons and ions. Previous measurements of solar flare temperatures were based on the temperature of electrons, and it was assumed that electrons and ions would have the same temperature. But using computer simulations to recalculate the temperature of solar flares with modern data, the researchers found that there could actually be important differences in the temperatures of the two particles that can last several minutes. In fact, solar flares could be as hot as 180 million degrees Fahrenheit. The findings

were published in the *Astrophysical Journal Letters* on September 3.

The new work offers a “paradigm shift” in the understanding of flare spectral lines, according to a statement. Since the 1970s, researchers have tried to find out why these dark or bright lines in what’s an otherwise uniform spectrum are broader than expected. One controversial hypothesis was that they occurred because of turbulent motions, but scientists have never been able to explain what caused that turbulence. “The new ion temperature fits well with the width of flare spectral lines ... **Read full text at Smithsonian Magazine:** <https://www.smithsonianmag.com/smart-news/solar-flares-may-be-more-than-six-times-hotter-than-researchers-previously-thought-finds-new-research-180987296/>

'Oumuamua

First known interstellar visitor is an “exo-Pluto”.

The first interstellar object to visit the solar system may have been a fragment of an icy exoplanet, research suggests.

When 1I/'Oumuamua was first spotted in 2017, astronomers quickly determined that it came from outside the solar system. But although it was initially classified as a comet from another star system, it may actually be the skin of an “exo-Pluto,” a completely unexpected class of Pluto-like objects anticipated to visit the sun.

“Everything about this object is consistent with it being a slab of nitrogen ice like you see on the surface of Pluto,” said Steve Desch, an exoplanet researcher at Arizona State University. Desch presented his findings in July at the Progress in Understanding the

Pluto Mission: 10 Years after Flyby conference in Laurel, Maryland.

Instead of being a mix of water ice, rock and carbon-rich material left over from the formation of the solar system, 'Oumuamua appears to be almost pure nitrogen ice. And rather than being a compact ball, the visitor is more elongated than any known body in the solar system and starkly different from the interstellar Comets 2I/Borisov and 3I/ATLAS, the only other known interstellar visitors.

“'Oumuamua is in a different category of object,” Desch told *Space.com* by email. “It’s much harder to find, but there are a lot more of them.” ...

Read full text at Space: <https://www.space.com/astronomy/dwarf-planets/1st-known-interstellar-visitor-oumuamua-is-an-exo-pluto-a-completely-new-class-of-object-scientists-say>



Illustration: NASA, ESA, and J. Olmsted and F. Summers (STScI)

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Soul and Soil Responsive interiors

What if surfaces could sense our emotions? What if a sofa or a curtain could interact with its surroundings? This isn't science fiction—it's the vision driving Ricoh, the Japanese company that has been pioneering printing solutions and digital services for over 85 years. Today, it looks to the future to innovate the way people and spaces connect, creating intelligent environments where well-being is at the heart of everyday experience.

This vision takes shape in the *Soul and Soil* project, presented during Milan Design Week 2025. Through a conductive printing technique and the use of AI, fabrics and furnishings are transformed into sensitive surfaces capable of communicating with the environment and those who live in it. A simple gesture —such as sitting down— is enough to activate the interaction, generating and transmitting data in real time. ...

Read full text at Design Wanted: <https://designwanted.com/ricoh-interactive-textiles-conductive-printing/>

Timber soccer stadium

Designed by VUILD, to be built in Fukushima, Japan

Fukushima United FC announces plans for a new timber stadium in Fukushima Prefecture, Japan, designed in collaboration with architecture startup VUILD. Developed as a 5,000-seat venue, the project introduces the country's first circular timber stadium concept, envisioned as a model for sustainable and community-driven architecture.

The proposal positions the stadium as a 'symbol of recovery,' as it will occupy a region that continues to carry the memory of a 2011 earthquake and nuclear disaster. Within this context, the project is a forward-looking gesture of resilience. With resilience and circular design embedded into its architecture, the stadium is intended as a lasting expression of the spirit of the area.

With its initial planning of the timber

stadium for Fukushima, Japan, VUILD seeks to maintain a human-scale form while accommodating 5,000 seats. Instead of concentrating all seating in a dominant main stand, the design circulates a cross-section equivalent to a two-story house. The team divides the stadium into four volumes, each with its own entrance.

Central to the concept is the use of timber sourced from local forests. Laminated wood will form the structural framework, with components engineered for disassembly and reuse. This approach by the at VUILD reflects a circular model, in which materials are cycled back into use rather than discarded. ... Read full text at DesignBoom: <https://www.designboom.com/architecture/japan-first-circular-timber-soccer-stadium-fukushima-united-fc-vuild-09-02-2025/>



Sophie First seated mannequin

Primark, Irish multinational fashion retailer, has unveiled its first seated mannequin designed to represent a manual wheelchair user, as part of its ongoing commitment to inclusion.

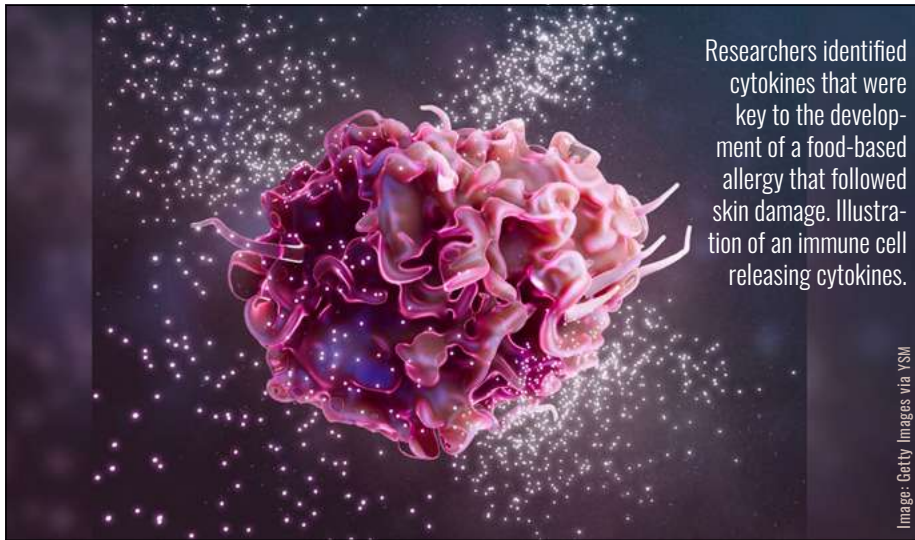
Named 'Sophie', the mannequin was inspired by and co-created with British television presenter, disability advocate and wheelchair user, Sophie Morgan.

Launching initially in 22 flagship stores across nine countries, including UK stores, 'Sophie' will take centre stage in displays showcasing Primark's Adaptive range, the first major women's and men's fashion collection on the high street designed specifically for those with disabilities, as well as its main fashion ranges.

The launch is part of a broader effort by Primark to bring more diversity to its mannequin range and reflect a wider variety of body sizes in store. ...

Read full text at Primark: <https://corporate.primark.com/en-gb/a/news/corporate-news/primark-unveils-new-mannequin-designed-to-represent-wheelchair-users>

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Researchers identified cytokines that were key to the development of a food-based allergy that followed skin damage. Illustration of an immune cell releasing cytokines.

Image: Getty Images via VSM

Skin injury

It may bring on food allergies.

There's a mysterious connection between our skin and our guts, specifically when it comes to food allergies. For reasons scientists don't fully understand, chronic skin conditions such as eczema are linked to food allergies; while the national prevalence of childhood food allergies is only around 8%, that prevalence rises to 30% in children with eczema. Researchers have discovered that in some cases, eczema can precede food allergies.

Now, a new study led by researchers at Yale School of Medicine (YSM) and published April 4 in the journal *Science Immunology* introduces a new hypothesis about this link: In mice, skin damage can trigger food allergies.

Working with mice with different kinds of skin injuries, including

lacerations and ultraviolet light damage, the scientists found that introducing new food proteins directly into the gut via a feeding tube at the time of skin damage induced new food allergies in the animals. The food had to be new to the animals; they wouldn't develop allergies to foods they'd previously eaten. And the introduction of the allergen — a substance that causes allergic reactions — had to happen within several hours of the skin injury. Foods introduced the next day seemed to be safe.

Before these findings, it was not clear whether events taking place so far apart from each other in the body could be linked through the immune system to trigger an allergy, the researchers said.

... Read full text at Yale School of Medicine: <https://medicine.yale.edu/news-article/skin-injury-may-bring-on-food-allergies/>

Binge-watching

Might actually be good for you, study finds.

If you enjoy binge-watching, chances are you have told yourself, "Just one more episode," more times than you can count. While it is often criticized as an unhealthy habit, new research from the University of Georgia suggests that extended viewing sessions might also carry some unexpected benefits.

According to the researchers, people who watch multiple episodes in a row often find that stories linger in their minds long after the screen goes dark. This tendency to keep thinking about what they watched is not necessarily negative. The study revealed that those who consume movies, shows, or even books in long stretches are more likely to remember the narratives and continue engaging with them through imagination, daydreaming, and fantasy.

"Humans are storytelling creatures," said Joshua Baldwin, lead author of the study and postdoctoral researcher at the University of Georgia. "One of the functions of narratives is the ability to satisfy motivations for things like connecting with other people, feeling autonomous and confident, and even security and safety."

"Stories have characters that fulfill these roles, and we can satisfy those needs through them."

Binge-watching may help viewers build mental worlds where stories continue even after finishing the series. And these tales may help them cope in times of stress. ... Read full text at Sci Tech Daily: <https://scitechdaily.com/binge-watching-might-actually-be-good-for-you-study-finds/#:~:text=Binge%2Dwatching%20may%20help%20viewers,cope%20in%20times%20of%20stress.>



Image: www.freepik.es

Live a better life learning how to keep your body, mind and soul balanced. Visit regularly MyAIU Body / MyAIU Mind / MyAIU Spirit and MyAIU Energy.



Image: www.freepik.es

Permeable pavement

Could it ease flooding woes in New York City?

Among the kosher markets, eateries and synagogues of Brooklyn’s Borough Park neighborhood, a quiet transformation is underway. On a recent overcast Saturday, the intersection of 37th Street and 12th Avenue looked like any other intersection in the area, surrounded by single-family homes and parking garages. But an important measure to mitigate mass flooding was implemented here some months ago, when New York’s Department of Environmental Protection (DEP) began to install seven miles of permeable pavement along curb lines.

Pavement covers so much of the urban landscape, but most of us probably don’t think much about how it impacts the flow of water through our cities—until a hurricane or big rainstorm

hits, and stormwater runs swiftly right off of it. The catastrophic flooding that hit parts of New York, New Jersey and Connecticut recently was an example of how sudden and dramatic the impact of such storms can be.

When storms produce widespread torrential rains, floods from storm surge can cause serious damage to our sewer systems. During the Atlantic hurricane season, the risk for flooding and storm surge increases. The National Oceanic and Atmospheric Administration (NOAA) projected that the hurricane season would be above normal, and rapid hurricane intensification has become more common in recent years. ... **Read full text at Reasons to be Cheerful:** <https://reasonstobecheerful.world/permeable-pavement-stormwater-flooding-new-york-city/>

This forest

It survived a megafire. Saving it involved destroying it twice.

Five miles down a dirt road in Plumas National Forest, at the northern end of the Sierra Nevada mountain range, lies a paradox. On one side of the road, a scorched wasteland of burnt toothpicks covers the Earth, a reminder of the devastating Dixie Fire that swept through this area four years ago. But a few hundred feet away, a stand of hardy, healthy ponderosa pines shoot into the sky, their branches reaching toward the sun. Small burn marks on the trunks of these trees are the only evidence of that brutal fire, which devoured nearly 1 million acres across five counties in 2021, making it California’s largest single wildfire to date.

How did one stand manage to survive such a devastating blaze almost intact when the other perished

entirely? Forest managers understandably want an answer to this question, backed by hard evidence.

Late last year, a team of researchers from California, the Forest Service, and The Nature Conservancy took a systematic look at how different forest management practices influence the frequency of fires that kill entire groves of trees. They surveyed 164 study plots that burned in the Dixie Fire, including the two neighboring stands in Plumas National Forest. It turns out that between 2003 and 2005, the U.S. Forest Service had removed roughly two-thirds of the trees in the surviving stand, and set a prescribed burn. The forest that went up in flames had been left untouched. ... **Read full text at Nautilus:**

<https://nautil.us/this-forest-survived-a-megafire-1236277/>



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The baby died

Whose fault is it?

American surrogacy is an enormous industry, taking in approximately \$5 billion in 2024, and the practice is expected to explode globally almost tenfold in the next decade. It seems especially popular in Silicon Valley, where a growing cadre of investors and executives have used it to grow their families. More than a dozen big tech companies provide five-figure subsidies to any employee who needs or wants to outsource gestational labor. A shocking number of techies now believe growing a baby can be a straightforward business transaction.

But intended parents and gestational carriers —IPs and GCs— are often uninformed about the dearth of regulation and completely unprepared for what can go wrong. Only one state, New York, requires agencies to be

licensed. America is the developed nation with the highest maternal mortality rate and one of the highest stillbirth rates. Compared to natural conception, carrying a genetically unrelated fetus more than triples the risk of severe, potentially deadly conditions, a statistic surrogates are rarely given. IPs do not always have to disclose complete medical information, including histories of certain conditions that may harm their GCs. ... Meanwhile, the increasing acceptance of “fetal personhood” means that, in many states, losing a pregnancy can be charged as a felony and potentially punished with life in prison. This is thorny enough when it’s a woman’s own baby. It’s exponentially more fraught when the carrier isn’t the parent. ... **Read full text at Wired:** <https://www.wired.com/story/the-baby-died-whose-fault-is-it-surrogate-pregnancy/>

Antarctic facilities

...rife with sexism and harassment.

A horrifying new workplace survey by the US National Science Foundation is raising alarms about a terrible HR crisis unfolding on the white continent. In particular, the report found that sexual assault, sexual harassment, and stalking were regular facts of life for those stationed on remote research stations.

The confidential survey was open to all 2,760 US Antarctic Program (USAP) employees and contractors stationed between 2022 and 2024. Of those who responded, a blistering 40% said they experienced at least one incident of sexual assault or harassment on the job.

Sexual assault and harassment is so endemic on USAP research bases that just under 70% of survey respondents said they witnessed at least one incident. These include sexual remarks or jokes,

overtly sexual flirtation, and touching in sensitive places without consent.

While you might imagine predatory men losing all self control due to cabin fever overwinter —a real concern, to be fair— the ratio of male to female victimhood is actually higher in Antarctica than the US national average. Of the USAP workers who were assaulted or harassed on base, nearly 60% identified as female, while 36% identified as male, suggesting a pervasive culture of workplace harassment.

Though nearly all workers who responded to the survey said they understood the definitions of sexual assault and harassment, less than 85% of them knew their options when it came to reporting incidents. ... **Read full text at Futurism:**

<https://futurism.com/antarctica-research-facilities-violence>



Image: Christopher Michel from San Francisco Creative Commons

Rangers take blood from a kakāpō parrot to test for antibodies as part of the vaccination trial.



Image: Lydia Urdstrom / OOC

Kākāpō

Can we vaccinate our rarest species before bird flu gets to them?

It is easy to imagine how it could happen. A petrel, flying east from the Indian Ocean at the end of the Austral winter, makes landfall at New Zealand's southern Codfish Island/Whenua Hou. Tired from its long journey, the petrel seeks refuge in the burrow of a green kākāpō: a critically endangered flightless species that is the world's fattest parrot. If the seabird intrudes when the kākāpō is primed to breed, the male parrot may attempt to mate with the smaller petrel, accidentally smothering it in the process.

In this case, there are two unwitting victims. The petrel harbours a deadly agent: H5 avian influenza. Soon after, bird flu begins to rip through the imperilled parrot population, pushing the waddling bird — which numbers fewer

than 250 individuals — to extinction.

This is the kind of scenario that New Zealand's conservationists are considering before the arrival of the spring migration season — as they have done for the past two years since a highly pathogenic strain of bird flu known as H5N1 began burning through global wildlife, spurring the largest sudden drop in the world's bird population in decades.

Tens of millions of wild birds have succumbed to H5 worldwide, but so far Oceania has managed to keep the virus out — buying time for New Zealand to add another weapon to its arsenal before thousands of birds arrive from distant shores. ... **Read full text at The Guardian:**

<https://www.theguardian.com/environment/2025/sep/02/new-zealand-vaccinations-rare-species-bird-flu-virus-pandemic-immunisation-migration>

Rewilding project

...aims to restore resilience to fire-prone Spain via wildlife.

Some 30,000 years ago, Stone Age people decorated a cave, today known as Cueva de los Casares, in central Spain with pictures of mating humans (most famously), geometric shapes, and animals. The most popular carved animal is the wild horse.

Cueva de los Casares sports at least two dozen images of wild horses. Eventually, these Pleistocene-era horses vanished — likely slaughtered for food or domesticated. But some 10,000 years later, wild horses have again returned to central Spain — this time to help with out-of-control fires and bring economic opportunity to a struggling region.

In 2023, *Rewilding Spain*, apart of *Rewilding Europe's* network, brought in the first 16 Przewalski's horses (*Equus ferus przewalskii*) from France to the highlands

of Spain's Guadalajara province, one of the least populated parts of the country. Once extinct in the wild, Przewalski's horse is the last fully wild horse in the world, genetically distinct from all domesticated horses. Originally from Mongolia, they've been rewilded to a number of countries in Europe.

"It was an amazing feeling ... to bring these animals here," says **Pablo Schapira**, team leader with *Rewilding Spain*. Before returning to his home country, **Schapira** spent a dozen years in Africa working with the NGO *African Parks*, including on species reintroductions. ...

Today, the project has 35 Przewalski's horses. ... **Read full text at Mongabay:** <https://news.mongabay.com/2025/08/rewilding-project-aims-to-restore-resilience-to-fire-prone-spain-via-wildlife/>



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campus

The climate cost of Ikea's fast furniture



By Maia Wikler

Snow blanketed the Eastern Side of Romania's Fagaras Mountains. It was quiet —except for the roar of chainsaws and trucks heaving with loaded logs. We stood breathless in a tight circle, having run through deep snow toward the cover of trees from an oncoming logging truck. “Look, look,” whispered Mihai, a Romanian forest investigator who is using a pseudonym for fear of reprisal. He pointed to the monitor of his drone as workers operating machinery pulled logs from destroyed riverbanks onto awaiting trucks.

For several minutes, we secretly watched the illegal

operation unfold. Then, a ring on the walkie-talkie from a team member who was keeping watch by our parked car down the road. Get out, he warned. Another logging truck was coming, and we could miss our window to leave the forest without blowing our cover.

There was only one way in and out: a narrow road marked with nearly impassable, deep, frozen ruts. The forest is technically protected; it is part of *Natura 2000*, the world's largest coordinated system of protected, highly valuable, threatened ecological areas, and the cornerstone of the European

Union's biodiversity policy. However, many *Natura 2000* sites in Romania are being illegally logged. An insatiable hunger for timber has fueled an unprecedented pillaging of some of Europe's last ancient forests.

Agent Green, a Romanian environmental nongovernmental organization, has spent the last 10 years exposing state corruption and the illegal, destructive practices of the timber industry. My small documentary film crew joined three *Agent Green* team members that day. In the depths of winter on a week-end afternoon, the risk of encountering loggers was low, the *Agent Green* team said. Within minutes, however, one confronted us as chainsaws buzzed in the distance.

From communist conservation to Ikea deforestation

Communism, in a way, functioned as a conservation time capsule in Romania. It preserved a significant amount of the country's forests while rampant capitalism deforested most of Europe. Privatized global business interests were outlawed under communist rule; the forests and

mountains belonged to the people. As a result, the Carpathian Mountains are now a refuge for some of Europe's last ancient forests, brown bears, lynx, wolves, and bison.

At the height of communist dictator Nicolae Ceaușescu's brutal reign, Romanians found refuge and solace in nature. Romanian activist Gabriel Paun, founder of *Agent Green*, grew up in Romania under communism. “Those years were very harsh,” he said. “You had to obey, or you had to pay a very high price for yourself and your family.”

After communism fell in 1989 and Romania joined the EU in 2007, the country's forests opened for business, and massive land grabs occurred. Initially, Harvard University's endowment fund exploited the opportunity and became the largest private landowner in Romania —until it realized how contentious the land acquisition deal was. The university quickly washed its

hands clean by passing its purchase off to IKEA. Now, the fast furniture company, the world's largest furniture retailer, is the largest private forest owner in Romania. The company consumes a tree every two seconds, and in nearly two decades, nearly two-thirds of Romania's old-growth forests have been logged.

“I just remember the places where I used to grow up in the Carpathians, where there were intact forest landscapes,” said Paun. “Suddenly, after 2000, the companies came and started to cut... [Now] I can't recognize the places. I immediately get disorientated.”

The stakes are high for anyone who attempts to document, report, or organize against rampant deforestation in Romania. The nation's timber industry operators, widely referred to as the “timber mafia,” have been speculated to be responsible for the deaths of at least six patrolmen from Romania's Forest Guard in

“IKEA is using the globally famous Swedish sustainable forestry model across the globe, which is based on doing a systematic expansion into the last remaining ecosystems, wiping away these ecosystems, pushing away and silencing indigenous peoples.”

—Lina burnelius. *Environmentalist, Protect the Forest (skydda skogen)*

recent years; in another 650 registered incidents, people have been beaten, shot at, or otherwise attacked. Former Romanian Minister of Water and Forests, **Doina Pana**, survived mercury poisoning, which she believes was retaliation for her efforts to stop the timber mafia. **Paun** has also been targeted for his efforts in tracking and exposing the destruction of Romania's forests. After surviving several assassination attempts and receiving a tip that the timber mafia has a bounty on him, he fled the country and now lives in hiding.

Arguably, IKEA benefits from the volatility in Romania. "In a context of systemic corruption, poor law enforcement and logging pressure from global timber markets, Romania's forests are under massive threat of degradation and destruction," a 2024 investigative report by *Agent Green* and Swiss ENGO, *Bruno Manser Fonds*, states. Their report, based on a year-long investigation into IKEA-owned forests and contractors, concluded that IKEA sources timber using destructive forestry practices, including in protected *Natura 2000* sites. Forests rich in biodiversity were "fragmented, degraded, or even converted into barren landscapes," the report states.

These once-protected forests are now destined to become flat-pack furniture.

It's emblematic of a broader issue in Europe: Primary and old-growth forests have declined so much that they represent less than 3% of the EU's forests today; that decline is driven primarily by intensive timber harvesting. Given the dire situation, the EU recently developed guidelines for "mapping, monitoring and strictly protecting all the EU's remaining primary and old-growth forests."

Dissecting IKEA's sustainability claims

IKEA prides itself on being people and planet-positive. But convenience comes at a cost. IKEA's affordable, mass-produced fast furniture requires a steady stream of inexpensive timber.

Investigations by *Agent Green*, *Greenpeace*, and others have alleged that IKEA's logging practices in high conservation-value forests fail to uphold EU biodiversity initiatives. IKEA disputes those claims. The company told *Atmos* that it abides by national and EU regulations, upholds certification from the Forest Stewardship Council, comports with U.N. principles on Indigenous rights, and doesn't operate in

"Primary mixed-species forests are 70% more effective carbon sinks and less vulnerable to wildfires, droughts, and infestations than monoculture plantations. Yet, IKEA's voracious appetite for the world's forests expands unabated."

—*Maia Wikler, Writer*

legally protected areas.

FSC is a responsible forestry certification created to protect primary forests from logging in the Global North and agriculture in the Global South. But there are structural problems and conflicts of interest within FSC—including being cofounded by IKEA.

In an email to *Atmos*, IKEA claimed that standing tree volume has increased by 1 million cubic meters under the company's stewardship. However, "that's not very meaningful unless you break it down by age class and species," said Dr. **Peter Wood**, an international forest policy expert at the University of British Columbia who previously served on FSC-rulemaking committees. That could represent millions of new saplings planted in previously clear-cut areas as forests continue to decline. Without a pre-logging baseline to compare the current situation to, along with the exact percentage of primary forest that remains compared to what was there before logging, **Wood** said, major loopholes emerge.

IKEA claimed it does not

deforest under the Food and Agriculture Organization's definition. However, this definition includes clearcuts as forested area, Wood explained. Indeed, recent grassroots efforts have tried to pressure companies to commit instead to ensuring their operations are "ancient- and endangered-forest-friendly."

Nonetheless, IKEA continues to maintain a global image of sustainability. IKEA operates the *IKEA Foundation*, which funds activists through a fellowship program, partners with environmental influencers for sponsored promotions, and partially funds the *Doc Society Climate Story Fund*, which

supports documentary films on climate justice.

The company also rests its laurels on Sweden's heritage and environmental reputation. Yet, the Swedish government and forest industry have allegedly targeted environmentalists such as **Lina Burnelius** for exposing IKEA and Sweden's destructive forestry practices. **Burnelius** recently teamed up with *Agent Green* to prevent Sweden's forests from meeting the same fate as Romania's.

"[IKEA is] using the globally famous Swedish sustainable forestry model across the globe, which is based on doing a systematic expansion into the last remaining ecosystems, wiping away these ecosystems, pushing away and silencing indigenous peoples," she explained. "Sweden is not the leader in sustainable forestry. We are the leader in





A Sami man uses his snow scooter during a reindeer herding.

Image: Jonathan Nackstrand / AFP via Getty Images / grist.org

greenwashing unsustainable forestry. And the FSC label has been their alibi... It's certified destruction."

Timber at the cost of indigenous rights

Burnelius and her colleagues at *Protect the Forest (Skydda Skogen)* say they asked IKEA many times to show their suppliers, but to no avail. **Burnelius** believes the lack of supply chain transparency is deliberate. To address this, **Burnelius'** colleague, **Jon Andersson**, created the first comprehensive, open-access database that maps forests throughout Sweden. Their monitoring recently revealed that 45,000 hectares have been approved for logging in high conservation value forests and irreplaceable primary forests.

I traveled with **Burnelius** to northern Sweden, past an unrelenting sea of tree plantations and clear cuts, where we documented Swedish forestry practices and several FSC-certified sites on the ground. We drove 6 hours from Umea to Jokkmokk, just north of the Arctic Circle on Sápmi lands, to meet with her friend **Jannie**, a Sámi reindeer herder. Sámi people claim their forests, which are integral to reindeer herds, are being destroyed by clear-cut logging, and that timber is likely in the IKEA supply chain.

Near Jokkmokk, a few patches of intact forests remain. Tufts of pistachio-colored lichen blanket the forest floor, and gauzy, black lichen drape the tree branches —food for the reindeer, which

have followed the migration routes of their ancestors for generations. For nearly 2,000 years, the lives of the Sámi and the reindeer have been intertwined. The reindeer have provided the Sámi with food, clothing, tools, and shelter, all vital in the harsh Arctic environment, while also balancing the Arctic ecosystem. Reindeer herding remains a vital economic, cultural, and ecological practice. But forest loss could threaten it all.

Sámi herders need to put the reindeer inside corrals with supplementary feed because the "[tree] plantations are suffocating the lichen," said **Jannie**. The tightly packed monocultures that have replaced primary forests don't let in enough light to sustain lichens. A 2016 study found that 71% of Swedish forests with abundant lichen growth had disappeared in the six decades prior. Last winter, **Jannie** traveled 12 hours by car to gather enough lichen for the reindeer.

Jannie's elders told her that when industrial-scale deforestation began in Sweden, the Sámi had abundant lands and lichen, so they were happy to share with the forestry companies. But now, she said, "we have nothing left to give here. They are looking at our empty wallets and want the entire wallet as well."

The expansion of the fast furniture empire

Jannie's experience is no exception. Swedish investigative journalist **Lisa Röstellund** reported countless Sámi reindeer herders with the same story of forest loss in her book, *Forestland. An Investigation*. "Time and again, I observed big players [in the forestry industry] cutting down old forests that were not allowed in FSC regulations, but they kept their certifications anyway," said **Röstellund**.

Röstellund's research culminated in sixty long-form articles, a large collection of both public and secret documents, and interviews with 248 individuals, some of whom held senior positions in departments of state or were employed by the forestry industry. She discovered internal reports from the Swedish government and forestry industry deliberately misleading the public to believe increased clear-cutting was good for the environment. To **Röstellund**, this draws "many parallels to the oil industry because of the reports that they know exactly what they are doing."

Röstellund's investigations drew threats from Sweden's forestry industry. "I have never

experienced anything like what I did when I published my stories about the Swedish forestry. [They] started a smear campaign toward me as an individual journalist," she said. "I've heard from colleagues who have stopped reporting on that issue because the [industry] is so powerful."

Now, the Swedish furniture empire is crossing hemispheres. IKEA has acquired more than 23,000 hectares of land in New Zealand since 2021, despite Māori dissent. The company plans to plant pine tree plantations, claiming climate benefits at the expense of Indigenous communities and natural ecosystems, per an investigation by the non-profit, *Disclose*.

Primary mixed-species forests are 70% more effective carbon sinks and less vulnerable to wildfires, droughts, and infestations than monoculture plantations. Yet, IKEA's voracious appetite for the world's forests expands unabated. Ancient forests are a vital last line of defense against an intensifying climate crisis and rapidly declining biodiversity. The stakes are higher than ever. The planet, frontline defenders say, has already lost too much to see history repeat itself.

Read full text by Maia Wikler for Atmos: <https://atmos.earth/bounties-mafias-and-the-climate-cost-of-ikeas-fast-furniture/>

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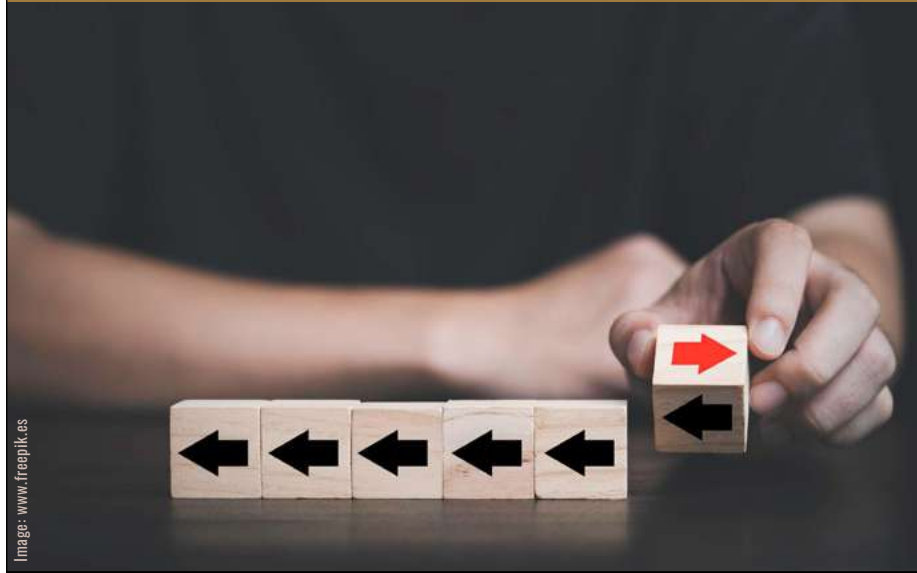


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- Communication & Investigation (Comprehensive Resume)
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- Risk Management in Change Initiatives
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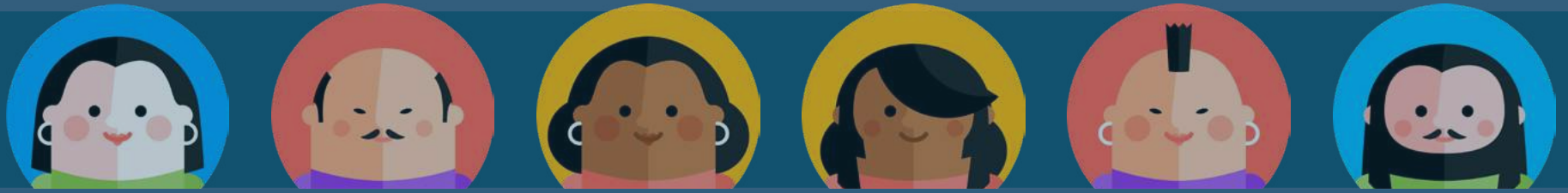
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about us

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Atlantic International University is accredited by the Accreditation Service for International Schools, Colleges and Universities (ASIC). ASIC Accreditation is an internationally renowned quality standard for colleges and universities. Visit ASIC's Directory of Accredited Colleges and Universities. ASIC is a member of CHEA International Quality Group (CIQG) in the USA, an approved accreditation body by the Ministerial Department of the Home Office in the UK, and is listed in the International Directory of the Council for Higher Education Accreditation (CHEA). The University is based in the United States and was established by corporate charter in 1998.

Our founding principles are based on the United Nations Universal Declaration of Human Rights; per article 26, **AIU** believes that Higher Education is a Human Right. The University has implemented a paradigm shifting educational model for its academic programs that have allowed it to move closer to this goal through the self-empowerment of its students, decentralization of the learning process, personalized open curriculum design, a sustainable learning model, developing 11 core elements of the Human Condition within **MYAIU**, and utilizing the quasi-infinite knowledge through the use of information technology combined with our own capacity to find solutions to all types of global issues, dynamic problems, and those of individuals and multidisciplinary teams. Due to these differentiations and the university's mission, only a reputable accrediting agency with the vision and plasticity to integrate and adapt its processes around **AIU**'s proven and successful innovative programs could be selected. Unfortunately, the vast majority of accrediting agencies adhere to and follow obsolete processes and requirements that have outlived their usefulness and are in direct conflict with the university's mission of offering a unique, dynamic, affordable, quality higher education to the non-traditional student (one who must work, study what he really needs for professional advancement, attend family issues, etc.).

We believe that adopting outdated requirements and processes would impose increased financial burdens on students while severely limiting their opportunities to earn their degree and advance in all aspects. Thus, in selecting the ASIC as its accrediting agency, **AIU** ensured that its unique programs would not be transformed into a copy or clone of those offered by

the 10,000+ colleges and universities around the world. Since ASIC is an international accrediting agency based outside the United States, we are required by statute HRS446E to place the following disclaimer: **ATLANTIC INTERNATIONAL UNIVERSITY IS NOT ACCREDITED BY AN ACCREDITING AGENCY RECOGNIZED BY THE UNITED STATES SECRETARY OF EDUCATION.** Note: In the United States and abroad, many licensing authorities require accredited degrees as the basis for eligibility for licensing. In some cases, accredited colleges may not accept for transfer courses and degrees completed at unaccredited colleges, and some employers may require an accredited degree as a basis for eligibility for employment. Potential students should consider how the above may affect their interests, **AIU** respects the unique rules and regulations of each country and does not seek to influence the respective authorities. In the event that a prospective student wishes to carry out any government review or process in regards to his university degree, we recommend that the requirements of such are explored in detail with the relevant authorities by the prospective student as the university does not intervene in such processes.

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School of Business and Economics



THE SCHOOL OF BUSINESS AND ECONOMICS allows aspiring and practicing professionals, managers, and entrepreneurs in the private and public sectors to complete a self paced distance learning degree program of the highest academic standard.

The ultimate goal is to empower learners and help them take advantage of the enormous array of resources from the world environment in order to eliminate the current continuum of poverty and limitations.

Degree programs are designed for those students whose professional experience has been in business, marketing, administration,

economics, finance and management.

Areas of study: Accounting, Advertising, Banking, Business Administration, Communications, Ecommerce, Finance, Foreign Affairs, Home Economics, Human Resources, International Business, International Finance, Investing, Globalization, Marketing, Management, Macroeconomics, Microeconomics, Public Administrations, Sustainable Development, Public Relations, Telecommunications, Tourism, Trade.

School of Social and Human Studies



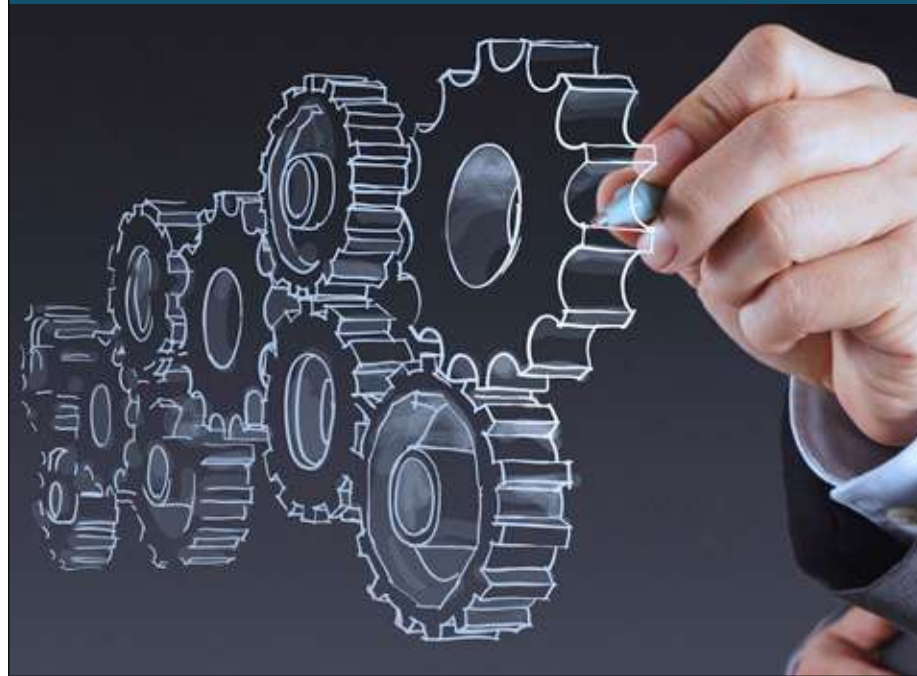
THE SCHOOL OF SOCIAL AND HUMAN STUDIES is focused on to the development of studies which instill a core commitment to building a society based on social and economic justice and enhancing opportunities for human well being.

The founding principles lie on the basic right of education as outlined in the Declaration of Human Rights. We instill in our students a sense of confidence and self reliance in their ability to access the vast opportunities available through information channels, the world wide web, private, public, nonprofit, and nongovernmental organizations in an ever expanding global community.

Degree programs are aimed towards those whose professional life has been related to social and human behavior, with the arts, or with cultural studies.

Areas of Study: Psychology, International Affairs, Sociology, Political Sciences, Architecture, Legal Studies, Public Administration, Literature and languages, Art History, Ministry, African Studies, Middle Eastern Studies, Asian Studies, European Studies, Islamic Studies, Religious Studies.

School of Science and Engineering



THE SCHOOL OF SCIENCE AND ENGINEERING seeks to provide dynamic, integrated, and challenging degree programs designed for those whose experience is in industrial research, scientific production, engineering and the general sciences. Our system for research and education will keep us apace with the twenty-first century reach scientific advance in an environmentally and ecologically responsible manner to allow for the sustainability of the human population. We will foster among our students a demand for ethical behavior, an appreciation for diversity, an understanding of scientific investigation, knowledge of design innovation, a

critical appreciation for the importance of technology and technological change for the advancement of humanity.

Areas of Study: Mechanical Engineering, Industrial Engineering, Chemical Engineering, Civil Engineering, Electrical Engineering, Computer Engineering, Physics, Chemistry, Biology, Mathematics, Communications, Petroleum Science, Information Technology, Telecommunications, Nutrition Science, Agricultural Science, Computer Science, Sports Science, Renewable Energy, Geology, Urban Planning.

Online Library Resources



WITH ACCESS TO A GLOBAL CATALOG created and maintained collectively by more than 9,000 participating institutions, **AIU** students have secured excellent research tools for their study programs.

The **AIU** online library contains over 2 billion records and over 300 million bibliographic records that are increasing day by day. The sources spanning thousands of years and virtually all forms of human expression. There are files of all kinds, from antique inscribed stones to e-books, from wax engravings to MP3s, DVDs and websites. In addition to the archives, the library **AIU** Online offers electronic access to more than 149,000 e-books, dozens of databases and more than 13 million full-text articles with pictures included. Being able to access 60 databases and 2393 periodicals with more than 18 million items, guarantees the information required to perform the assigned research project. Users will find that many files are enriched with artistic creations on the covers, indexes, reviews, summaries and other information. The records usually have information attached from important libraries. The user can quickly assess the relevance of the information and decide if it is the right source.

Education in the 21st century

AIU Service

AIU is striving to regain the significance of the concept of education, which is rooted into the Latin “educare”, meaning “to pull out”, breaking loose from the paradigm of most 21st century universities with their focus on “digging and placing information” into students’ heads rather than teaching them to think.

For **AIU**, the generation of “clones” that some traditional universities are spreading throughout the real world is one of the most salient reasons for today’s ills. In fact, students trained at those educational institutions never feel a desire to “change the world” or the current status quo; instead, they adjust to the environment, believe everything is fine, and are proud of it all.

IN A WORLD where knowledge and mostly information expire just like milk, we must reinvent university as a whole in which each student, as the key player, is **UNIQUE** within an intertwined environment.

This century’s university must generate new knowledge bits although this may entail its separation from both the administrative bureaucracy and the faculty that evolve there as well.

AIU thinks that a university should be increasingly integrated into the “real world”, society, the economy, and the holistic human being. As such, it should concentrate on its ultimate goal, which is the student, and get him/her deeply immersed into a daily praxis of paradigm shifts, along with the Internet and research, all these being presently accessible only to a small minority of the world community.

AIU students must accomplish their self-learning mission while conceptualizing it as the core of daily life values through the type of experiences that lead to a human being’s progress when information is converted into education.

The entire **AIU** family must think of the university as a setting that values diversity and talent in a way that trains mankind not only for the present but above all for a future that calls everyday for professionals who empower themselves in academic and professional areas highly in demand in our modern society.

We shall not forget that, at **AIU**, students are responsible for discovering their own talents and potential, which they must auto-develop in such a way that the whole finish product opens up as a flower that blossoms every year more openly.

THE AIU STANCE is against the idea of the campus as a getaway from day-to-day pressure since we believe reality is the best potential-enhancer ever; one truly learns through thinking, brainstorming ideas, which leads to new solutions, and ultimately the rebirth of a human being fully integrated in a sustainable world environment. Self-learning is actualized more from within than a top-down vantage point, that is to say, to influence instead of requesting, ideas more than power. We need to create a society where solidarity, culture, life, not political or economic rationalism and more than techno structures, are prioritized. In short, the characteristics of **AIU** students and alumni remain independence, creativity, self-confidence, and ability to take risk towards new endeavors. This is about people’s worth based not on what they know but on what they do with what they know.

Read more at: aiu.edu

AIU offers educational opportunities in the USA to adults from around the world so that they can use their own potential to manage their personal, global cultural development. The foundational axis of our philosophy lies upon self-actualized knowledge and information, with no room for obsolescence, which is embedded into a **DISTANCE LEARNING SYSTEM** based on **ANDRAGOGY** and **OMNIOLOGY**. The ultimate goal of this paradigm is to empower learners and help them take advantage of the enormous array of resources from the world environment in order to eliminate the current continuum of poverty and limitations.

This will become a crude reality with respect for, and practice of, human and community rights through experiences, investigations, practicum work, and/or examinations. Everything takes place in a setting that fosters diversity; with advisors and consultants with doctorate degrees and specializations in Human Development monitor learning processes, in addition to a worldwide web of colleagues and associations, so that they can reach the satisfaction and the progress of humanity with peace and harmony.

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Now, it’s possible to earn your degree in the comfort of your own home. For additional information or to see if you qualify for admissions please contact us.

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