

IMPERIAL

Early Career
Researcher Institute



ECR Showcase

01-07-26

Welcome to the Early Career Researcher Showcase 2026!

This annual event is a celebration of the research being carried out by the Early Career Researcher community at Imperial College London.

Come and meet our amazing ECRs as they showcase their research and compete for prizes!

Programme of Events

10:30 - 13:00	Judging Session & Open Exhibition	SAFB 120-122
13:00 - 14:00	Participant Lunch	SAFB Foyer
14:00 - 15:00	Keynote Speech & Prize Ceremony	SAFB G34 LT
15:00 - 16:00	Drinks Reception & Networking	SAFB Foyer

ECR Showcase Entries



Aeronautics

AERO 1 - Mario Miranda

Built to Bend: Smarter Wing Design for Turbulent Skies

AERO 2 - Alberto Bodas Gallego

Magnetic Control of Hydrogen Flames for Sustainable Flight

AERO 11 - Hui Ling Wong

Greener routes, bumpier rides? Investigating the turbulence risk of ice supersaturated regions (ISSRs)

AERO 12 - Ningyuan Fu

Smart Surfaces for Reducing Aerodynamic Drag

Bioengineering

BIO 3 - Afraa Alzoubi

Ultrasound for drug delivery to the brain

BIO 4 - Alexandra Yarger

How dragonflies feel their wings

BIO 5 - Hendrik Beck

What insects can teach robots about walking

BIO 13 - Jiatong Jiang

Personalised Neurostimulation: Helping the Nervous System Recover Movement

BIO 14 - Lulah Lyons

Molecules that remember: building DNA systems that record how their environment changes over time

BIO 15 - Margherita Montavoci

Your body already knows how to fight cancer: sometimes it just needs a little help!

BIO 16 - Thomas Else

Molecular ultrasound: hearing cells deep inside the body



Brain Sciences

BRAIN 17 - Sam Boulger

The first to fall: identifying the brain cells most vulnerable to Alzheimer's disease



Centre for Environmental Policy

CEP 18 - Chatchawan Genarkarn

Can Carbon Pricing Finance Climate Technologies in Southeast Asia?

Chemical Engineering

CHEM 19 - Aqiela Mahannada

Turning Sunlight and Water into Clean Hydrogen: Why Heat and Material Design Matter

CHEM 21 - Aubin Ramon

From llamas to the clinic: designing nanobody drugs with AI

CHEM 20 - Ari Luna Rueda

From Models to Controllers: An LLM-Driven Workflow for Autonomous Process Control Design

CHEM 22 - Diya Agrawal

Stealth Medicine: Hiding Life-Saving Drugs in Red Blood Cells

CHEM 23 - Shivam Sharma

How Battery Gases Reveal Hidden Chemical Reactions



Civil & Environmental Engineering

CIV 6 - Qijie Li

CITYVERSE

CIV 7 - Sumesh Erikandath

Closing the concrete carbon loop

CIV 24 - Molly Balassa

The efficient design of wind turbine support towers

CIV 25 - Sepideh Akbari

When One Failure Brings Everything Down: What Structural Design Guidelines Miss in Progressive Collapse

CIV 26 - Yu Cheng

Can Chaos Be Calmer?



Electrical & Electronic Engineering

EEE 8 - Katherine Sephton

Investigate below the surface of a painting with machine learning

EEE 27 - Ambuj Gupta

Measuring the Strength of Future Electric Grids

EEE 28 - Annie Chiu

A Map for Mending Broken Heart(beats)



Imperial Business School

IBS 29 - Alejandro Hermida Carrillo

‘Gonna Hear Me Roar’: The Acoustics of Political Persuasion

Institute of Clinical Sciences

ICS 30 - Soodeh Kalaie

Genetic Rhythms - AI Reveals the Fingerprint of Genes on the Beating Heart

ICS 31 - Rafaella Sigala

Proteins, Hearts & Big Data: Unlocking the Secrets of Human Cardiovascular Disease

Life Sciences

LS 32 - Belinda Boateng

Biology, ecology, and management implications for the Coreid bug

LS 33 - Jecinta Ayamba

Development of An Antigen Capture Test for Onchocerciasis
Diagnosis

LS 34 - Joy Jacob

Learning from survivors: A new approach to malaria vaccines

LS 35 - Yinka Adeniji

Not Learned, But Known: The Voice in the Dark



Metabolism, Digestion & Reproduction

MDR 36 - Alexander Bracanovic

Unlocking the Genetics of Preterm Birth in South Asian Women

National Heart & Lung Institute

NHLI 37 - Alba Martinez Basalo

Reprogramming our largest organ: the future of human skin repair and regeneration

School of Public Health

SPH 38 - Haoyu Dang

How Do Indoor Phthalates Enter the Human Body through Inhalation Exposure?

Surgery and Cancer

S&C 9 - Emiko Sultana

Your Postcode Shouldn't Decide Your Surgery - But It Might

S&C 39 - Charlie Johnson

Causal Clinical-Radiomics Analysis Reveals Heterogeneous Survival Benefit from Chemotherapy in Lung Cancer Patients

S&C 40 - Grace MacDonald

Radiotheranostics as an emerging tool for cancer diagnosis and treatment

S&C 41 - Tianhui Zhu

Is Your AI Ready for Clinical Practice? CARES-AI, a Readiness Checklist



Join us for the Keynote Speech

IMPERIAL

Early Career Researcher Institute

ECR Showcase: Keynote Speech

The 3 C's for Impact

with Dr Gbemi Oluleye, Associate Professor in
Sustainable Market Mechanisms

Wednesday 01 July 2026 | 14:00-14:45

South Kensington Campus



**For more information,
scan the QR code or go to:**
ecri.short.gy/keynote



Imperial College London

The keynote speech, will be followed by the prize ceremony for the winners of the ECR Showcase competition.

All attendees are then welcome to join us for a networking drinks reception in the Sir Alexander Fleming Building Foyer.

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Contact Us

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