8. Shortnews

1. Silver Notice

The Narcotics Control Bureau (NCB), in coordination with INTERPOL, has issued its first Silver Notice against Pawan Thakur, wanted in connection with the seizure of around 82 kilograms of cocaine in Delhi in November 2024.

About Silver notice

New Alert Tool - The Silver Notice is the newest addition to INTERPOL's colour-coded alerts, created to help countries trace and recover assets linked to crime.

Scope of Use - It allows member states to seek information on assets such as properties, vehicles, bank accounts, and businesses tied to criminal networks.

Legal Follow-up - By identifying and locating such assets, it enables legal steps like seizure or confiscation, in line with national laws.

Pilot Project - Launched with 52 countries, including India, the notice originated from Italy's request to track the assets of a senior mafia member.

Other Significant INTERPOL Notices

Red Notice - To seek the location and arrest of persons wanted for prosecution or to serve a sentence.

Yellow Notice - To help locate missing persons, often minors, or to help identify persons who are unable to identify themselves.

Blue Notice - To collect additional information about a person's identity, location or activities in relation to a criminal investigation.

Orange Notice - To warn of an event, a person, an object or a process representing a serious and imminent threat to public safety.

Silver Notice (pilot phase) - To identify and trace criminal assets

INTERPOL–United Nations Security Council Special Notice - Issued for entities and individuals who are the targets of UN Security Council Sanctions Committees.

About Narcotics Control Bureau (NCB)

Nodal Agency - The NCB is India's chief drug law enforcement and intelligence body under the Ministry of Home Affairs.

Establishment - Formed on 14th November 1985 under the Narcotic Drugs and Psychotropic Substances Act, 1985 (NDPS Act).

Headquarters - Located in New Delhi.

1. P-47 Protein

Scientists at the S. N. Bose National Centre for Basic Sciences (SNBNCBS), have discovered that protein p47 functions as a "mechanical chaperone," a finding that may open new treatment avenues for diseases linked to protein instability. A mechanical chaperone is a protein that protects other proteins from damage caused by physical forces, such as stretching or unfolding, helping them maintain their shape and function under mechanical stress. Canonical chaperones are specialized proteins that assist other proteins in folding correctly, prevent misfolding, and help refold damaged proteins, especially under stress conditions like heat or crowding inside cells.

About the discovery

Mechanical Chaperone Role - The study shows that p47 functions as a "mechanical chaperone," shielding proteins from damage due to physical stress.

Redefining Accessory Proteins - Highlights those accessory proteins in cellular mechanics and protein quality control play a bigger role than just assisting canonical chaperones.

First Single-Molecule Evidence - Provides the first proof of a cofactor protein independently exhibiting force-dependent protective activity.

Scientific Background

Mechanical Forces on Proteins - In cells, proteins face constant mechanical stress during transport, degradation, and cytoskeletal remodelling, affecting folding and function.

Canonical Chaperones - Well-studied proteins that guide folding, but the role of cofactors like p47 has remained less explored.

Previous Role of p47 - Known mainly as an assistant to the cellular machine p97 in protein trafficking, degradation, and membrane fusion.

Methodology of the Study

Experimental Tool - Researchers used single-molecule magnetic tweezers to mimic mechanical forces inside cells.

Direct Binding - p47 was found to attach to mechanically stretched proteins, helping them refold under continuous pulling.

Foldase-like Activity - This mirrors canonical chaperone behaviour, showing p47's independent role in protein stabilization.

Significance of the Findings

Protein Stability - Establishes p47 as a key protector against mechanical stress.

Redefining Accessory Proteins - Demonstrates that cofactors can act autonomously, beyond assisting canonical chaperones.

Therapeutic Insight - Opens avenues for targeting p47-like proteins in diseases linked to protein instability.

Potential Applications

Medical Use - Could inspire treatments for conditions involving protein instability under stress, such as heart muscle disorders and laminopathies.

Drug Development - Expands focus toward mechanical chaperones and cofactors as potential therapeutic targets

3. Mahabodhi Temple

Bhutan's Prime Minister Tshering Tobgay visited the Mahabodhi Temple in Bodhgaya, Bihar, a UNESCO World Heritage Site revered as the place where Lord Buddha attained enlightenment. As tokens of goodwill, he was presented with a replica of the Mahabodhi Temple, a sacred Bodhi leaf.

About Mahabodhi Temple

The Mahabodhi Temple Complex is one of the four holy sites related to the life of the Lord Buddha, and particularly to the attainment of Enlightenment.

The other three sites -

1. **Lumbini** (Nepal) - Birthplace of Buddha.
2. **Sarnath** (Uttar Pradesh) - Site of the first sermon (Dharma-Chakra-Pravartana).
3. **Kushinagar** (Uttar Pradesh) - Place of Buddha's Mahaparinirvana (death).

Location - Situated near the Niranjana River (also known as the Falgu/Phalgu River) in Gaya district, Bihar, India.

UNESCO Recognition - Declared a UNESCO World Heritage Site in 2002. Recognised for its architectural excellence and historical association with Buddha's life.

Enlightenment - Prince Siddhartha attained enlightenment under the Bodhi Tree, becoming Buddha in the 6th century BCE

Built by - Originally built by Ashoka in the 3rd century, later renovated in the 5th-6th centuries CE

Architectural Features

Brick Construction - Among the earliest Buddhist temples built entirely with brick.

Main Shikhara - A 50-meter-high pyramidal tower, adorned with niches, arch motifs, and intricate carvings.

Corner Towers - Four identical smaller towers at the corners, each crowned with an umbrella-shaped dome.
Vajrasana (Diamond Throne) - Stone platform marking the exact site of Buddha's meditation.

4. Operation Black Forest

Union Home Minister Amit Shah felicitated CRPF, Chhattisgarh Police, DRG, and Cobra jawans for successfully carrying out Operation Black Forest.

About Operation Black Forest

Joint Operation - CRPF, including elite CoBRA units, Chhattisgarh Police, and District Reserve Guard (DRG).
Location - Targeted Karreguttalu Hill (KGH), a major Naxal stronghold on the Chhattisgarh–Telangana border.
Command Centre - Coordinated from the Ghalgam Forward Operating Base, established in 2022.
Community Outreach - Security forces built trust with locals, delivered welfare schemes, and disrupted Naxal support networks.
Objective - To dismantle Naxal headquarters and infrastructure, aligning with India's target of eliminating Left Wing Extremism by March 31, 2026.

About Karregutta Hills

Geographical Advantage - Rugged terrain, stretching 60 km in length and 5–20 km in width, made the region ideal for guerrilla warfare.
Cross-Border Cover - Its location on the Chhattisgarh–Telangana border complicated security operations, giving Maoists an added layer of protection.
Stronghold of Maoists - Served as the command centre for major Maoist outfits, including the People's Liberation Guerrilla Army (PLGA) Battalion No. 1, the most powerful Maoist military formation.

5. Debrigarh Wildlife Sanctuary

Debrigarh Wildlife Sanctuary, Odisha, received NTCA approval to become a tiger reserve after a remarkable ecological and social transformation.

About Debrigarh Wildlife Sanctuary

Location - Situated in Bargarh district, Odisha, near the Hirakud Dam on the Mahanadi River.
Historical Significance - Associated with freedom fighter Veer Surendra Sai, who used Barapathara within the sanctuary as his base during the uprising against British rule.
Vegetation - Dominated by dry deciduous mixed forests.
Flora - Major tree species include Sal, Asana, Bija, Aanla, and Dhaura.
Fauna - Home to diverse wildlife such as tigers, leopards, sloth bears, hyenas, spotted deer, antelopes, sambar, gaur, nilgai, bison, and langurs.

Unique Ecosystem Advantage

Shares a 100 km boundary with the Hirakud Wetland.
Habitat diversity - Wetlands + grasslands + forests. Over 300 bird species; 120+ migratory species.

Significance of the Sanctuary

Peaceful Rehabilitation - Debrigarh is among the rare sanctuaries in Odisha where all human settlements have been fully relocated.
Voluntary Relocation - Around 400 families were shifted through extensive consultations, ensuring the process was consensual and free from coercion.