IUGS IFG and ENFSI APST Collaboration, State Forensic Science Bureau, Latvia
On 23-25 April, Jodi Webb (IUGS-IFG FBI Adviser) and Lorna Dawson (IUGS-IFG Treasurer) attended the ENFSI APST working group meeting organised by the State Forensic Science Bureau, in Latvia. Jodi presented case work examples in a talk entitled: ‘The Garden Gnome is Innocent! Geologically Derived Building Materials in Criminal Cases.’ Lorna presented on a recent case on the, ‘Discrimination of wood fragments in a murder investigation using chemical profiles’. Additionally, they participated in soil lab case related topics including the evaluation of evidence and reporting and new methods under development, such as filtration for non-pollen particles and Artificial Intelligence. The visit included a field expedition to the Baltic sea, where reference samples were collected from three different beaches and garent sand. Lorna is on the APST Committee with responsibility for Training and Education discussing opportunities to deliver routes to best practice for key stakeholders. There were over 50 delegates attended, from over 12 countries, including UK, USA, Latvia, The Netherlands, Poland, Hungary, Spain, Portugal, Germany and Switzerland.

Forensic Soil Sampling and Illegal Mining, Amazon Rainforest, Brazil
In March-April 2024, Marcelo Tortolero (IUGS-IFG Student Representative and GIN Manager) visited the Amazon Rainforest in Brazil to collect soil samples from illegal artisanal and small-scale gold mining (ASGM) sites (garimpos), to investigate mercury contamination. This related to illegal mining in the 1990s as recent as January 2024, and at an operational garimp o. As part of a PhD research project at the Department of Science and Technology of the University of Sannio (Benevento, Italy) the aim is to provide insights for the Brazilian Federal Police regarding the varying levels of mercury-related environmental impact associated with different stages of illegal ASGM in Jardim do Ouro, Pará, located in the Brazilian Amazon. This collaborative project from the University of Sannio involves partnerships with the Brazilian Federal Police, the State University of Campinas, and Serabi Gold.

Sampling Crime Scenes and Exhibits, Johannesburg, South Africa
On 21-23 May 2024, Laurance Donnelly (IUGS-IFG Chair), attended the ‘11th World Conference on Sampling and Blending’, Johannesburg, South Africa. He gave a presentation on, ‘Challenges Associated with the Forensic Geological Sampling of Crime Scenes and Exhibits for Police and Law Enforcement Criminal Investigations’. This provided the opportunity to develop forensic geology sampling practice to align with the ‘Theory of Sampling’. Further research is planned to improve forensic geology protocols by variance and bias testing at crime scenes and exhibits. Additionally, geological strategies were explored for the traceability and provenance determination of illegal gold in South Africa.

Battery Minerals and Crime, Jiangsu Province, China
On 28-31 May 2024, Laurance Donnelly (IUGS-IFG Chair), attended the,‘9th China International New Energy Industry Expo, CLNB Jiangsu Province, China’. The theme of the event was, ‘Empowering a Sustainable Future with Dual Carbon Intelligence’. Laurance’s presentation included battery minerals, conflict minerals and associated crimes.

IUGS-IFG Website
In May 2024, the new IUGS-IFG web site became operational. The previous site at QUB will be decommissioned. IUGS-IFG committee members are encouraged to contact Matheus Pereira Nogueira e Silva (IUGS-IFG Website Manager) for any relevant information to be uploaded onto the website. Matheus is acknowledged for developing and managing the website, with support from Fabio Salvador, Elisa Bergslien, Alastair Ruffell and Jennifer McKinley.

Source: Dr Laurance Donnelly, Chair, IUGS-IFG