

Research leadership

Recent and past research awards (University and Institute)

Centre for Energy Economics Research & Policy (CEERP), 2015-18, £1.2M investment from BP (renewable), with matching investment from HWU. New phase approved (2018-2021) ongoing.

Oil & Gas Innovation Centre, 2014-19, £13M funding from SFC (ETP consortium of 12 Scottish Universities)

NERC Centre for Doctoral Training in Oil & Gas, 2013-18, £10M combined funding from NERC, HEIs and Industry

Shell Centre for Exploration Geoscience, 2013-18, £3M investment from Shell, with matching investment from HWU

Lyell Centre for Earth & Marine Science and Technology, 2016 launch, >£21M investment from NERC, SFC and HWU

Instituto do Scienza di Petroleo e Gas (ISPG, Lisbon), 2014 start, approx. £300k p.a. investment by GALP Energia in new ALP in Portugal, with a similar investment in JIP and PGR research at IPE

Gubkin Approved Learning Partner, Moscow, 2013 start, approx. £150k initial investment from Gubkin (matching from HWU)

Edinburgh Collaborative of Subsurface Science and Engineering (ECOSSE), 2006-12, £3M investment by SFC. Programme leader increased external funding, including £3M for ICCR-1 (Carbonate Reservoirs Research) – ICCR-2 (>£5M with Edinburgh University)

Recent and past programmes and awards (personal)

Heartbeat of the Earth (2022-25, approx.. £50,000 funding)

Award of a Leverhulme Research Fellowship to work on a novel project looking at tectonic pulsing as a control on deepwater sedimentation worldwide

Japan Society for the Promotion of Science (2021-23)

Short-term visiting professor, throughout Japan. Field work in Okinawa, coupled with lab work at the Geological Survey of Japan

South China Sea Research Programme (2018 ongoing).

Engagement as Distinguished Professor at China University of Geoscience, Wuhan, with involvement in the South China Sea research group. Wide range of duties helping to scientifically upskill the College of Marine Science and Technology. Mentoring of staff and supervision of PhD students

Contourite Systems (2019-2022, approx. £110,000)

An exciting and innovative research project in collaboration with ExxonMobil to investigate both the sedimentology and organic geochemistry of contourite systems.

Mediterranean Outflow and Climate Change over past 5 My (2010-2016, approx. £10M)
Chief Scientist and chief proponent (PI) of Integrated Ocean Drilling Programme (IODP), Expedition 339: Mediterranean Outflow. Two months scientific drilling (2011-12), chief scientist for 60 shipboard scientists and technicians, 25 shore-based scientists, and (with the Captain), for 50 ship's crew at sea. Follow-up research programme for analysis and publication involving scientists (large leverage of funding from across the world).

Contourites Joint Industry Programme (2016-2019, £180k starting funds then ongoing). Now run by Prof. Hernandez-Molina (RHUL then Granada University, Spain).

Turbidites Research Programme (2012-2017, £250k combined funding). One EPSRC PhD student – deepwater massive sands. One PTDF/Watt PhD student – thin-bedded turbidites. One RA – Repsol project, thin-bedded turbidites.

Petroleum Geoscience Research IPE. Former lead for Petroleum Geoscience Research Group (2012-17). Three PhD students (approx. £200k funding). MOWER (2012-2015, Spanish Research Council, part award £15k, Co-I). Sandy Contourites (2010-2014, HWU and industry, £150k, PI)

Eirik Drift and North Atlantic Deepwater Circulation (2005-2009, NERC RAPID award £450k + ship-time, Co-I)

Numidian Flysch, Tunisia: Sedimentology, Provenance and Reservoir Potential (2006-08, Anadarko, £26k, PI)

The Anatomy of Hyperpynites (2004-08, NERC/NEXEN oil, Korean Ocean Research Institute and Seoul National University, Korea, £105k, PI)

Slope instability on continental margins: a geomorphometric approach (2002-2006, Maltese Government/Statoil, £86k, Co-PI)

Indian Ocean Marine Policy development for the 21st Century (2001-2003, UNESCO/ESCAP/IOMAC, Co-I)

Deep-water sedimentary systems: petroleum potential (1998-2001, Royal Society/BP, £220k, PI)

Landslide Hazards, Jammu and Kashmir, NW India (1999-2001, UNESCO, £21k, PI)

Disaster Management: Northeast India (1997-1999, UNESCO/IGCP, £15k, PI)

Oligo-Miocene sedimentation in northern Sicily (1994-1997, Catana University, Italy; Bordeaux and Lille universities, France; Anadarko, British Gas, Shell; £88, PI)

West Hebridean margin: deepwater sedimentation and slope instability (1994-1998, NERC LOIS-SES programme, BGS Edinburgh, Co-I)

Geoscience Education: an International Perspective (1994-1996, ODA/multiple sponsors, £50k, PI)

Canary Seamount flanks, off NW Africa: sedimentation and slope stability (1993-1998, NOC, Co-I)

Deepwater massive sands – their nature, depositional processes and sedimentary architecture (1992-1997, JIP 5 sponsors, £125k, PI)

Sedimentology and Petroleum Characteristics of Paleogene Carbonates, NE Libya (1992-1997, Arabian Gulf Oil Company, Libya, £72k, PI)

Jurassic sequence stratigraphy and carbonate sedimentology in the central Apennines (1992-1996, Southampton University/Urbino University, Italy, £46k, PI)

Vertical sequences in turbidite systems: nature and controls (1991-1994, Oryx Energy, £45, PI)

Evolution and sedimentation of Makran margin, offshore Pakistan (1991-1995, Pakistan Government, Netherlands and Pakistan Institutes of Oceanography, £56k, PI)

Oligo-Miocene paleocirculation in the Tethys (1990-1992, IUGS/UNESCO, Moscow State University, Russia; Cyprus Geological Survey, University of Tunis, £21k, PI)

Nature and controls on early diagenesis in deepwater sediments (1987-1990, NERC, £126k, PI)

Bengal Fan tectonics and sedimentation, ODP Leg 116, NE Indian Ocean (1988-1990, NERC, PI)

West Pacific basins, Mariana and Pigafetta: Image Logging (1986-1989, Bangladesh Geological Survey, PI)

Geoscience for Development (1986-1988, ODA/multiple sponsors, PI)

Paleotethys basins of Yunnan Province, SW China (1985-1987, British Council/Academia Sinica, PI)

Reservoir Geometry and Sedimentology of the Statfjord Oilfield, (1985-1987, Statoil and partners, PI)

Miura-Boso forearc basin sedimentation, S Central Japan (1984-1988, NERC, PI)

Mississippi fan Quaternary evolution, DSDP Leg 96, Gulf of Mexico (1986-88, NERC, PI)

Angola basin sedimentation, DSDP Leg 75, SE Atlantic (1984-1986, NERC, PI)

Contourite Facies: Gulf of Cadiz, S Iberian margin (1982-1986, CNRS, France, Bordeaux University, PI)

Laurentian fan lobe morphology, NW Atlantic (1984, Royal Society John Murray Award, PI)

Sandstone Depositional Architecture Research Fellowship (1982-1984, Royal Society of Edinburgh, PI)

Fine-grained deepwater sedimentation: facies and processes (1980-1982, NERC, PI)