# **Stuart Nicholas Lane**

### Professeur ordinaire, Université de Lausanne

stuart.lane@unil.ch Faculté des géosciences et de l'environnement, Université de Lausanne, LAUSANNE, CH-1015, Switzerland

Date/Place of Birth: 29th July 1970 (Age 43), Birmingham, UK

Nationality: English

Languages: English, French

Married, two children (aged 10 and 7)

**Personal interests:** Running, mountain biking, skiing, mountaineering-related activities.

## **Employment History:**

## Main positions

| <b>2011-</b><br>2014-<br>2012-                  | Professeur ordinaire en géomorphologie, Université de Lausanne<br>Director of the Institute of Earth Surface Dynamics<br>Conseilleur d'études pour la géographie   |
|---|--|
| <b>2004-11</b><br>2008-11<br>2006-07<br>2004-06 | Professor of Physical Geography, Durham University Executive Director, Institute of Hazard and Risk Research, Durham University Director of Research (with lead responsibility for University submission to RAE2008) Director of Research Postgraduate Studies, Department of Geography, Durham University |
| <b>2000-04</b><br>2001-02<br>2000-03            | Professor of Physical Geography, University of Leeds Director of Research, School of Geography, University of Leeds BSc Programme Manager, Geography   |
| <b>1994-99</b><br>1994-98                       | Assistant University Lecturer, then University Lecturer, University of Cambridge Assistant Course Director then Course Director, M.Phil. in Environment and Development  |

## Other Positions

1996-99

1992-99

| 2003-06 | Adjunct Professor, University of Guelph      |
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| 2001-05 | Adjunct Professor, INRS-Georésources, Québec |

1998 Visiting Scientist, Departement de Géographie, Université de Montréal

Tutor, Fitzwilliam College, University of Cambridge

1998 Visiting Scientist, National Institute for Water and Atmospheric Research, New Zealand

## Education

| 1998-1994 | University of Cambridge |
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1988-1991 Geographical Tripos, Parts 1a, 1b and II, First with distinction in all three parts

1991-1994 Doctoral Student, jointly supervised at Department of Civil Engineering, The City University, London

## **Academic Awards and Recognition**

| 2012 | Victoria Medal from the Royal Geographical Society for 'conspicuous merit in research in Geography'                |
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| 2011 | Rural Economy and Land Use Programme award for the best interdisciplinary research project                         |
| 2011 | Ralph A Bagnold medal from the European Geoscience Union in recognition of research achievements in geomorphology. |
| 2009 | American Geophysical Union citation for excellence in reviewing for Water Resources Research                       |
| 2009 | Project arising from RELU flood management work chosen by Defra to be one of three demonstration projects          |

Fellow and Director of Studies in Geography, Fitzwilliam College, University of Cambridge

2008 Association of Rivers Trusts annual award for contributions to science

2002 Awarded a Phillip Leverhulme Prize by The Leverhulme Trust as a '..compelling recognition of...research achievements..'

Awarded the President's Prize by the Remote Sensing and Photogrammetry Society for the best paper published in the *Photogrammetric Record* (Volumes 15 and 16)

Awarded the 11th Harold J. Schoemaker award (with co-authors) by the International Association of Hydraulics Research for the most outstanding publication in the *Journal of Hydraulics Research*, Volume 36(5) to 38(4)

Jan de Ploey Award, International Association of Geomorphologists, for 'outstanding contribution to the field of monitoring and numerical modelling of flow, sediment transport and solute processes'

1991 British Geomorphological Research Group Dissertation Prize

1991 Royal Geographical Society Alfred Steers Dissertation Prize

#### **Undergaduate Examination Awards**

Fitzwilliam College Cockle Prize (1989), Stratton Scholarship (1989), Cockle Prize (1990), Walker Scholarship (1990), 1912

Travel Award (1990), Mary Lucking Prize (1991), Senior Scholarship (1991), Leathersellers' Scholarship

(1991-1994).

Cambridge University Andrew Hall Prize (1989), Phillip Lake Prize (1990), Phillip Lake Prize (1991), William Vaughan Lewis Prize

(1991).

## **Service**

#### Editorial

2012- Editor-in-Chief WIRES Water

2008- Managing Editor of Earth Surface Processes and Landforms

2008-11 Editorial Board, Progress in Physical Geography

2007-13 Editorial Collective, Geography

## **Learned Societies**

2011- Panel Member SSGM (Swiss Geomorphological Society)

2008-9 Chair of RGS-IBG Annual Conference with membership of Research Committee (2008-10) and Council (2009-10)

2000-2 Committee member, Modelling and Techniques Special Interest Group of the Remote Sensing Society

1997 Judge for the Chartered Institute of Water and Environmental Management Dissertation Prize

1996-9 Co-convener of a special three-year working group of the BGRG to explore geomorphological applications of flow and sediment transport modelling

1996-9 Executive Committee, British Geomorphological Research Group 1993-4 Executive Committee, British Geomorphological Research Group

## **Grant Awarding Bodies**

2013 Member, REF Review Committee, NERC Research Centres

2012 Panel Chair, UK NERC, Changing Water Cycle Final Call

2012 Panel Member, UK NERC, Changing Water Cycle Final Call shortlisting

2011 Panel Co-Chair, UK NERC – India MoES Changing Water Cycle

2010 Panel Member, UK NERC, Review of Sustainable Use of Natural Resources Programme

2010 Panel Chair, UK NERC, Changing Water Cycle First Call

2010 Panel Member, UK NERC, Storms grants planel

2009 Panel Member, Swiss NSF, NCCR Competition 2009

2009 Panel Chair, Academy of Finland Assessment Panel in Water Engineering

2002-10 Elected to the Peer Review College of the Engineering and Physical Sciences Research Council, 2002-5. Relected for 2006-10.

2002-5 Elected to the Freshwater Science Peer Review Committee of the Natural Environment Research Council (with transfer to the NERC Peer Review College)

1994- Research Council and other reviews:

UK: NERC, EPSRC, Defra

Austrian Research Council

AXA

Belgian Federal Science Policy Office

**European Science Foundation** 

Finnish Research Council

Netherlands Organization for Scientific Research

Norwegian Research Council

NSERC (Canada)

NSF (USA)

Swiss National Science Foundation

### Community

- 2008-11 Trustee, Wear Rivers Trust
- 2004-9 Trustee, Yorkshire Dales Rivers Trust; now elected as an Honorary Member
- 2002-5 Member, Wharfe River Board
- 2009 Organised two day training workshop for the Association of Rivers Trusts

## Policy and Industry

- 2009 Panel reviewer, Environment Agency Integrated Catchment Science Programme
- 2006- Founding and Senior Academic Partner, Willis Research Network
- 2002-4 Office of Science and Technology *Foresight Futures: Flood Risk* contributor to technical report for Phase 1; core team member for Phase 2, Package A; leader on Rural Response Measures for Phase 3. Member of Pitt Foresight Update team 2008.
- 2000-3 Member of the EPSRC Network on Floodplain Conveyance
- 2000-3 Member of the EPSRC Network on Sediment Transport

## **Higher Education**

- 2007 Lancaster University Environmental Science UoA RAE External Advisor
- 2000- Promotions assessments and External Assessor of Chair, Appointment and Promotion applications for University of Greenwich, University of Southampton, University of Western Ontario (Canada), SUNY Buffalo (USA), Massachussetts Institute of Technology (USA), Oxford University, Oxford Brookes University, Exeter University, Queen Mary College University of London, University of Liverpool, Duke University (USA), Trento University (Italy), Bristol University, Manchester University, Loughborough University

## Organisation of Conferences and Meetings

- 2010 Co-organised a Workshop on *Tipping Points*, Durham University
- 2010 Co-organised an International Workshop on Water and Risk, in Durham University, funded by the Institute for Advanced Study
- 2009 Co-organised the British Society for Geomorphology Annual Meeting, Durham
- 2009 Chair, Annual Conference, Royal Geographical Society
- 2009 Co-convened an International Workshop in Durham on River Bifurcations
- 2008 Co-convened a session at the European Geosciences Union
- 2006 Co-organised the British Hydrological Society National Symposium
- 2004 Co-convened a one-day session at the Spring American Geophysical Union: Flow Sediment Transport and Stream Ecology
- 2002 Co-organised the British Geomorphological Research Group Annual Conference in the University of Leeds
- 2001 Co-convened a one-day session at the Spring American Geophysical Union.
- Organised on behalf of the Environment Agency a one day workshop on Gravel Management, Wharfedale, North Yorkshire, December 2001. Attracted 40 delegates.
- Co-organised a joint Technical Symposium between the Photogrammetric Society and the British Geomorphological Research Group, The Generation of High Quality Topographic Data for Hydrology and Geomorphology, University of Leeds, January 2001.
- 1997 Co-convened a one-day session at the 22nd Congress of the European Geophysical Society in Vienna, Austria
- 1995 Co-organised the British Geomorphological Research Group Annual Conference in the University of Cambridge, September 1995. Attracted 150 delegates, 30% from overseas.

## **Major Research Projects**

PI, Principal Investigator Co-I, Co-Investigator

## Université de Lausanne

Office fédérale de l'environnement. 2013-2016

ESSPACE: participation publique dans la gestion des cours de l'eau

Canton Valais. 2012-2015

High mountain sediment flux studies Fonds d'innovation pédagogique. 2012-13

E-BIB-ALPIN

Fondation Herbette. 2012-13

Climate change impacts on Alpine sediment transfer

## **Durham University**

ESRC(RELU) (PI). 2010 to 2011

Building Adaptive Strategies for Environmental Change in River Catchments

Defra (Co-I). 2010 to 2011

Demonstration Test Catchments: river catchment characterisation

Leverhulme Trust (PI) 2010 until move to Lausanne

Tipping Points: mathematics, metaphors and meanings

NERC (Co-I with Professor PJ Ashworth (PI), Dr. Greg Sambrook-Smith, Dr. A Nicholas and Dr. RJ Hardy). 2008-2010

Dynamics & deposits of braid-bars in the world's largest rivers: morphology, processes & subsurface sedimentology

EPSRC (Co-I, with Professor D Lerner (PI) and others). 2008-2010.

URSULA: Urban River Corridors and Sustainable Living Agendas

Environment Agency (PI, with Professor AL Heathwaite and Dr, S. Reaney). 2007-2009

SCIMAP development for CSF

ESRC (Co-I with Professor SJ Whatmore (PI)). 2007-2010

Knowledge controversies and rural land management: flood risk

Willis Reinsurance (PI, with Professor DN Petley). 2007-2011

Willis Research Network Fellow in Hazard and Risk Research

Eden Rivers Trust (PI). 2006-2009

Modelling the simultaneous impacts of land management upon high flows and low flows

Yorkshire Dales Rivers Trust (PI). 2006 - 2009

Where have all the brown trout gone? The role of catchment factors in an indicator species decline

NERC and Defra (PI, with Professor AL Heathwaite). 2005-2009

Risk-based modelling of diffuse agricultural pollution

NERC (PI, with Prof. J. Best). 2005 - 2008

Flow structures and flow partitioning at river channel bifurcations

EPSRC (Co-I as part of EPSRC Flood Consortium). 2004 - 2007

Work Package 8.3: Flood risk, sediments and ecology

NERC (Co-I with Dr. G. Sambrook-Smith (PI), Prof. P. Ashworth, Prof. J. Best)

Generation, preservation and prediction of sandy braided alluvium: an integrated ground penetrating radar, digital photogrammetry and probabilistic modelling approach

## **Leeds University**

NERC (PI with Prof. J. Best), 2003 -2006

3D quantification of coherent flow structures in large alluvial channels@ a new approach using multibeam sounding

Environment Agency and Yorkshire Water (PI), 2002 -2006

Numerical prediction of in-stream habitat for optimisation of compensation flow releases

NERC (Co-I with Prof J. Best (PI)). 2002 -2005

The fluid dynamics and bed morphology of large natural open-channel confluences: 3D field quantification and numerical modelling NERC (PI, with Prof A. McDonald and Prof. M. Kirkby). 2001- 2004.

Integrated modelling of water, water quality and sediment delivery for Best Practice in upland environments

Environment Agency (Co-I with Prof. A. McDonald, PI). 2000 –2001.

Information Requirements for the Integrated Management of Agricultural Areas in Sensitive River Basins

NERC (PI). 2000 -2002

Development and testing of numerical code for treatment of complex river channel topography in three-dimensional CFD models with structured grids

NERC (PI with Professor K.S. Richards and Professor R.I. Ferguson). 1999 - 2003 Application of Large Eddy Simulation for understanding natural river flows

# **University of Cambridge**

EPSRC (PI with Dr. J. Chandler and Professor K.S. Richards). 1997 - 1999

Automated close range photogrammetry for determination of the roughness of flume channel surfaces
NERC (PI with Professor K.S. Richards). 1997-1999

Application and testing of a two-dimensional sorting and transport model for gravel-bed rivers
NERC (PI with Professor K.S. Richards and Dr. J. Chandler). 1995 - 1998

Numerical modelling of flow processes at river channel confluences.

## Research Publications and Related Activities

#### Journal editing and related responsibilities

- 2011- Editor-in.Chief, WIRES WATER
- 2008- Managing Editor, Earth Surface Processes and Landforms
- 2007-13 Editorial Collective, Geography
- 2008-12 Member of the Editorial Board, Progress in Physical Geography
- 2006-11 Member of the Editorial Board, Geography Compass
- 2003- Member of the Editorial Advisory Board, Journal of River Basin Management
- 2004-7 Member of the Editorial Board, Earth Surface Processes and Landforms and Editor, Earth Surface Exchanges
- 2003-7 Member of the Editorial Board, Transactions of the Institute of British Geographers
- 2002-7 Member of the International Editorial Board, *Photogrammetric Record* and Refereeing Editor.

## Edited Books and Journal Special Editions

- Lane, S.N., Chandler, J.H. and Richards, K.S. (eds) 1998. Landform Monitoring, Modelling and Analysis. Wiley, Chichester, 454pp.
- Bates, P.D. and Lane, S.N. (eds), 1998. High Resolution Flow Modelling in Geomorphology and Hydrology. Hydrological Processes, 12.
- Bates, P.D. and Lane, S.N. (eds), 1999. *High Resolution Flow Modelling in Geomorphology and Hydrology*. Wiley Advances in Hydrology Series (1999), Chichester
- Lane, S.N. and Chandler, J.H., 2003. The generation of high quality topographic data for hydrology and geomorphology: new data sources, new applications and new problems. *Earth Surface Processes and Landforms*, **28**.
- Bates, P.D., Lane, S.N. and Ferguson, R.I. (eds), 2005. *Computational Fluid Dynamics: applications in environmental hydraulics*, Wiley, Chichester, 531pp.

### Academic Journal Papers (refereed)

#### 1993

**Lane, S.N.**, Richards, K.S. and Chandler, J.H. 1993. Developments in photogrammetry: the geomorphological potential. *Progress in Physical Geography*, **17**, 306-328

#### 1994

- Lane, S.N., Chandler, J.H. and Richards, K.S. 1994. Developments in monitoring and terrain modelling small-scale river-bed topography. Earth Surface Processes and Landforms. 19, 349-368
- Lane, S.N., Richards, K.S. and Chandler, J.H., 1994. Distributed sensitivity analysis in modelling environmental systems. Proceedings of the Royal Society, Series A, 447, 49-63

## 1995

- Clifford, N.J., Richards, K.S., Brown, R.A. and Lane, S.N. 1995. Calibration and testing of an infra-red turbidity probe. *Hydrological Sciences Journal*, **40**, 771-91
- Clifford, N.J., Richards, K.S., Brown, R.A. and Lane, S.N. 1995. Scales of variation of suspended sediment concentration and turbidity in a glacial meltwater stream. *Geografiska Annaler*, **77A**, 45-65
- Lane, S.N., 1995. The dynamics of dynamic alluvial channels. Geography, 80, 159-174
- Lane, S.N., Richards, K.S. and Chandler, J.H. 1995. Morphological estimation of the time-integrated bedload transport rate. *Water Resources Research*, **31**, 761-72
- Richards, K.S., Arnold, N., Lane, S.N., Chandler, J.H., Chandra, S. and Mattikalli, N. 1995. Numerical landscapes: 'static' and 'dynamic' form-process relationships. *Zeitschrift für Geomorphologie, Supplementband*, **101**, 201-20

## 1996

- Chandler, J.H., Lane, S.N. and Richards, K.S., 1996. The determination of water surface morphology at river channel confluences using automated digital photogrammetry and their consequent use in numerical flow modelling. *International Archives of Photogrammetry and Remote Sensing*, XXXI, B7, 99-104.
- Lane, S.N., Richards, K.S. and Chandler, J.H., 1996. Discharge and sediment supply controls on erosion and deposition in a dynamic alluvial channel. *Geomorphology*, **15**, 1-15.

## 1997

- Lane, S.N. and Richards, K.S., 1997. Linking river channel form and process: Time, space and causality revisited. *Earth Surface Processes and Landforms*, 22, 249-60.
- Lane, S.N., 1997. The reconstruction of bed material yield and supply histories in gravel-bed streams. Catena, 30, 183-96.
- West, J.J., Hope, C. and Lane, S.N., 1997. Climate change and energy policy: The impacts and implications of aerosols. *Energy Policy*, **25**, 923-39.

#### 1998

Bates, P.D. and Lane, S.N. (editors) 1998. High Resolution Flow Modelling in Hydrology and Geomorphology. *Hydrological Processes* 12 Special Issue, 1129-396.

- Biron, P.A., Lane, S.N., Roy, A.G., Bradbrook, K.F. and Richards, K.S., 1998. Sensitivity of bed shear stress estimates from velocity profiles: the problem of vertical sampling resolution. *Earth Surface Processes and Landforms*, **23**, 133-40.
- Bradbrook, K.F., Biron, P., **Lane, S.N.**, Richards, K.S. and Roy, A.G., 1998. Investigation of controls on secondary circulation and mixing processes in a simple confluence geometry using a three-dimensional numerical model. *Hydrological Processes*, **12**, 1371-96.
- Butler, J.B., Lane, S.N. and Chandler, J.H., 1998. Assessment of DEM quality for characterising surface roughness using close range digital photogrammetry. *Photogrammetric Record*, **16**, 271-91.
- **Lane, S.N.** 1998. Hydraulic modelling in hydrology and geomorphology. A review of high resolution approaches. *Hydrological Processes*, **12**, 1131-50.
- Lane, S.N. and Richards, K.S., 1998. Two-dimensional modelling of flow processes in a multi-thread channel. *Hydrological Processes*, **12**, 1279-98.
- Lane, S.N., Biron, P.M., Bradbrook, K.F., Butler, J.B., Chandler, J.H., Crowell, M.D., McLelland, S.J., Richards, K.S. and Roy, A.G., 1998. Integrated three-dimensional measurement of river channel topography and flow processes using acoustic doppler velocimetry. *Earth Surface Processes and Landforms*, **23**, 1247-67.

- Lane, S.N., Bradbrook, K.F., Richards, K.S., Biron, P.M. and Roy, A.G., 1999. The application of computational fluid dynamics to natural river channels: three-dimensional versus two-dimensional approaches. *Geomorphology*, **29**, 1-20.
- Lane, S.N., Bradbrook, K.F., Richards, K.S., Biron, P.M. and Roy, A.G., 1999. Time-averaged flow structure in the central region of a stream confluence: A discussion. *Earth Surface Processes and Landforms*, **24**, 361-7.

2000

- Bradbrook, K.F., **Lane, S.N.**, Richards, K.S., 2000. Numerical simulation of time-averaged flow structure at river channel confluences. *Water Resources Research*, **36**, 2731-46.
- Bradbrook, K.F., **Lane, S.N.**, Richards, K.S., Biron, P.M. and Roy, A.G., 2000. Large Eddy Simulation of periodic flow characteristics at river channel confluences. *Journal of Hydraulic Research*, **38**, 207-16.
- Chandler, J.H., Lane, S.N. and Ashmore, P.E., 2000. Measuring river-bed and flume morphology and parameterising bed roughness with a Kodak DCS460 digital camera. *International Archives of Photogrammetry and Remote Sensing, XXXII.*
- Lane, S.N., 2000. The measurement of river channel morphology. Photogrammetric Record, 16, 937-61.
- **Lane, S.N.**, Bradbrook, K.F., Richards, K.S., Biron, P.M. and Roy, A.G., 2000. Secondary circulation in river channel confluences: measurement myth or coherent flow structure?. *Hydrological Processes*, **14**, 2047-71.
- Lane, S.N., James, T.D. and Crowell, M.D., 2000. The application of digital photogrammetry to complex topography for geomorphological research. *Photogrammetric Record*, **16**, 793-821
- Tarras-Wahlberg, N.H., Flachier, A., Fredrikson, G., **Lane, S.N**., Lundberg, B. and Sangfors, O., 2000. Environmental impact of small-scale and artisanal gold mining in south western ecuador: Implications for the setting of environmental standards and the management of small scale mining. *Ambio*, **29**, 484-91.
- Westaway, R.M., Lane, S.N., and Hicks, D.M., 2000. Development of an automated correction procedure for digital photogrammetry for the study of wide, shallow gravel-bed rivers. *Earth Surface Processes and Landforms*, **25**, 200-26

- Bradbrook, K.F., **Lane, S.N.**, Richards, K.S., Biron, P.M. and Roy, A.G., 2001. Flow structures and mixing at an asymmetrical open-channel confluence: a numerical study. *ASCE Journal of Hydraulic Engineering*. **127**, 351-368.
- Butler, J.B., Lane, S.N. and Chandler, J.H. 2001. Application of two-dimensional fractal analysis to the characterisation of gravel-bed river surface structure. *Mathematical Geology*, **33**, 301-30.
- Butler, J.B., Lane, S.N. and Chandler, J.H. 2001. Automated extraction of grain-size data from gravel surfaces using digital image processing for hydraulic research. *Journal of Hydraulic Research*, **39**, 1-11.
- Chandler, J.H., Shiono, K., Rameshwaren, P. and Lane, S.N., 2001. Automated DEM extraction for hydraulics research. *Photogrammetric Record*, **17**, 39-61.
- Crowell, M.D and Lane, S.N., 2001. Geomorphological and hydrological controls upon seedling performance during restoration of *Pinus sylvestris* woodland. *Global Ecology and Biogeography*, **10**, 147-60.
- Lane, S.N., 2001. Constructive comments on D. Massey Space-time, 'science' and the relationship between physical geography and human geography. *Transactions of the Institute of British Geographers*, **26**, 243-56.
- Lane, S.N., Porfiri, K. and Chandler, J.H. 2001. Monitoring river channel and flume surfaces with digital photogrammetry. *ASCE Journal of Hydraulic Engineering*, **127**, 871-77.
- Lau, S.S.L. and Lane, S.N., 2001. Continuity and change in environmental systems: the case of shallow lakes. *Progress in Physical Geography*, **25**, 178-202.
- Tarras-Wahlberg, N.H., Flachier, A., **Lane, S.N.**, Sangfors, O., 2001. Environmental impacts and metal exposure of aquatic ecosystems in rivers contaminated by small scale gold mining: The Puyango river basin, Southern Ecuador. *Science of the Total Environment*, 278, 239-261.
- Westaway, R.M., Lane, S.N. and Hicks, D.M., 2001. Airborne remote sensing of clear water, shallow, gravel-bed rivers using digital photogrammetry and image analysis. *Photogrammetric Engineering and Remote Sensing*, **67**, 1271-81. **2002**
- Butler, J.B., Lane, S.N., Chandler, J.H. and Porfiri, K., 2002. Through-water close-range digital photogrammetry in flume and field environments. *Photogrammetric Record*, **17**, 419-39.
- Lane, S.N., Hardy, R.J., Elliott, L. and Ingham, D.B., 2002. High resolution numerical modelling of three-dimensional flows over complex river bed topography. Hydrological Processes, 16, 2261-72.

- Lau, S.S.S. and Lane, S.N., 2002. Biological and chemical factors influencing shallow lake eutrophication: a long-term study. Science of the *Total Environment*, **288**, 167-81.
- Lau, S.S.S., **Lane, S.N.**, 2002. Nutrient and grazing factors in relation to phytoplankton level in a eutrophic shallow lake: the effect of low macrophyte abundance. *Water Research*, **36**, 3593-601.

- Carbonneau, P.C., **Lane, S.N.** and Bergeron, N., 2003. Low cost close range digital photogrammetry for the quantification of fish habitat. *International Journal of Remote Sensing*, **24**, 2837-2854.
- Ferguson, R.I., Parsons, D.J., Lane, S.N. and Hardy, R.J., 2003. Flow in meander bends with circulation at the inner bank. *Water Resources Research*, **39**, 1322 NOV 21 2003.
- Hardy, R.J., **Lane, S.N.**, Ferguson, R.I. and Parsons, D., 2003. Assessing the credibility of a series of computational fluid dynamic (CFD) simulations of open channel flow. *Hydrological Processes*, **17**, 1539-60.
- Lane, S.N. and Chandler, J.H., 2003. Editorial: the generation of high quality topographic data for hydrology and geomorphology: new data sources, new applications and new problems. *Earth Surface Processes and Landforms*, **28**, 229-30.
- Lane, S.N., James, T., Pritchard, H. and Saunders, M., 2003. Photogrammetric and laser altimetric reconstruction of water levels for extreme flood event analysis. *Photogrammetric Record*, **18**, 293-307.
- Lane, S.N., Westaway, R.M. and Hicks, D.M., 2003. Estimation of erosion and deposition volumes in a large gravel-bed, braided river using synoptic remote sensing. *Earth Surface Processes and Landforms*, **28**, 249-71.
- Tarras-Wahlberg, N.H. and Lane, S.N., 2003. Suspended sediment yield and metal contamination in a river catchment affected by El Niño events and gold mining activities: the Puyango river basin, southern Ecuador. *Hydrological Processes*, 17, 3101-23.
- Westaway, R.M., Lane, S.N. and Hicks, D.M., 2003. Remote survey of large-scale braided rivers using digital photogrammetry and image analysis. *International Journal of Remote Sensing*, **24**, 795-816.

2004

- Bradbrook, K.F., **Lane, S.N.**, Waller, S.G., Bates, P.D., 2004. Two dimensional diffusion wave modelling of flood inundation using a simplified channel representation. *International Journal of River Basin Management*, **3**, 1-13.
- Lane, S.N., Hardy, R.J., Ingham, D.B. and Elliott, L., 2004. Numerical modelling of flow processes over gravelly-surfaces using structured grids and a numerical porosity treatment. *Water Resources Research*, **40**, W01302 JAN 8 2004.
- Lane, S.N., Brookes, C.J., Holden, J. and Kirkby, M.J., 2004. A network index based version of TOPMODEL for use with high resolution digital topographic data. *Hydrological Processes*, **18**, 191-201.
- Carbonneau, P.E., **Lane, S.N.**, and Bergeron, N.E., 2004. Catchment-scale mapping of surface grain size in gravel-bed rivers using airborne digital imagery. *Water Resources Research*, **40**, W07202 JUL 22 2004.
- McDonald, A., Lane, S.N., Chalk, E. and Haycock, N., 2004. Rivers of dreams: on the gulf between theoretical and practical aspects of river restoration. *Transactions, Institute of British Geographers*, **29**, 257-81.

2005

- Carbonneau, P.E., Bergeron, N.E. and Lane, S.N., 2005. Texture based image segmentation applied to the quantification of superficial sand in salmonid river gravels. *Earth Surface Processes and Landforms*, 30, 121-7.
- Carbonneau, P.E., Bergeron, N. and Lane, S.N., 2005. Automated grain size measurements from airborne remote sensing for long profile measurements of fluvial grain sizes. *Water Resources Research*, **41**, W11426.
- Clark, J.M., Chapman, P.J., Adamson, J.K. and Lane, S.N., 2005. Influence of drought-induced acidification on the mobility of dissolved organic carbon in peat soils. *Global Change Biology*, **11**, 791-809.
- Keylock, C.J., Hardy, R.J., Parsons, D.R., **Lane, S.N.**, Ferguson, R.I. and Richards, K.S., 2005. The theoretical foundations and potential for large-eddy simulation (LES) in fluvial geomorphic and sedimentological research. *Earth Science Reviews*, 71, 271-304.
- Hardy, R.J., Lane, S.N., Lawless, M.R., Best, J.L., Elliot, L. and Ingham, D.B., 2005. Development and testing of numerical code for treatment of complex river channel topography in three-dimensional CFD models with structured grids. *Journal of Hydraulic Research*, 43, 468-480.
- Lane, S.N., 2005. Roughness time for a re-evaluation? Earth Surface Processes and Landforms, 30, 251-3.
- Lane, S.N., 2005. Deadening environmental space. Transactions of the Institute of British Geographers, 30, 4-6.
- Lane, S.N., 2005. Being critical: a reply to Maslin and des Clers. Transactions of the Institute of British Geographers, 30, 268-70.
- Parsons, D.R., Best, J.L., Orfeo, O., Hardy, R.J., Kostachuck, R. and Lane, S.N., 2005. The morphology and flow fields of three-dimensional dunes, Rio Paraná, Argentina: results from simultaneous multibeam echo sounding and acoustic Doppler current profiling. *Journal* of Geophysical Research, 110, F04S03.

- Carbonneau, P., Lane, S.N. and Bergeron, N., 2006. Feature based image processing methods applied to bathymetric measurements from airborne remote sensing in fluvial environments. *Earth Surface Processes and Landforms*, **31**, 1413-1423.
- James, T.D., Barr, S.L. and **Lane, S.N.**, 2006. Automated correction of surface obstruction errors in DSMs using off-the-shelf image processing. *Photogrammetric Record*, **21**, 373-97.
- Lane, S.N., Brookes, C.J., Heathwaite, A.L. and Reaney, S.M., 2006. Surveillant Science: Challenges for the management of rural environments emerging from the new generation diffuse pollution models. *Journal of Agricultural Economics*, **57**, 239-57.
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- Parsons, D.R., Best, J.L., Lane, S.N., Hardy, R.J., Kostaschuk, R., Shugar, D. and Orfeo, O., 2006. Morphology, flow and sediment transport over a natural 3D dune field. *Riverflow* 2006, Balkema, Netherlands.
- Yu, D. and Lane, S.N., 2006. Sub grid scale treatment for floodplain inundation modelling. *Riverflow 2006*, Balkema, Netherlands. 2007
- Chandler, J.H., Lane, S.N. and Walstra, A., 2007. Quantifying landform change. Chapter 6 in Chandler, J.H. (ed) *Applications of 3D measurement from images*, Whittles, Caithness, 139-70.
- Hicks, D.M., Duncan, M.J., Lane, S.N., Tal, M. and Westaway, R., 2007. Contemporary morphological change in braided gravel-bed rivers: new developments from field and laboratory studies. In Habersack, H., Piegay, H. and Rinaldi, M. (Editors), *Gravel-Bed Rivers VI: From Process Understanding to River Restoration*, Elsevier, Amsterdam.
- Lane, S.N., 2007. Other flood risks and their drivers. Chapter 11 in Thorne, C.R. et al. (eds) Future Flooding, Thomas Telford, London, 173-184
- Lane, S.N. and Thorne, C.R., 2007. River processes. Chapter 6 in Thorne, C.R. et al. (eds) Future Flooding, Thomas Telford, London, 82-
- Lane, S.N., Morris, J., O'Connell, P.E. and Quinn, P.F., 2007. Rural land management response measures. Chapter 17 in Thorne, C.R. et al. (eds) Future Flooding, Thomas Telford, London, 217-319.
- Lane, S.N. and Carbonneau, P., 2007. High resolution remote sensing for understanding instream habitat. Paper forthcoming in Wood, P.J., Hannah, D.M. and Sadler, J.P., *Hydroecology and Ecohydrology*, 185-204.

## 2008

- Biron, P.M. and Lane, S.N., 2008. Modelling hydraulics and sediment transport at river confluences. In Rice, S. Roy, A.G., and Rhoads B.L. *River Confluences, Tributaries and the Fluvial Network*, Wiley, Chichester, 17-44
- Hardy RJ., Parsons DR., Lane S.N., Best JL., Orfeo O. and Kostaschuk R. (2008). Three dimensional modelling of flow over a natural dune field in a large river with time evolving topography. In Marine and Dune Dynamics III, International workshop, April 1-3 2008. Eds Parsons, DR., Garlan, T & Best JL. P149-154.
- Parsons, D.R., Best, J.L., Lane, S.N., Kostaschuk, R.A., Hardy, R.J., Orfeo, O., Amsler, M.L. and Szupiany, R., 2008. Large river channel confluences. In Rice, S. Roy, A.G., and Rhoads B.L. *River Confluences, Tributaries and the Fluvial Network*, Wiley, Chichester, 73-92.

#### 2010

- Parsons, D.R., Amsler, M.L., Szupiany, R.N., Ashworth, P.J., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Sambrook Smith, G.H., Reesink, A.J.H. and Sandbach, S.D., 2010. Process-product relationships in a large multi-channel river: the Rio Parana, Argentina In Proceedings of the 6th IAHR Symposium on River, Coastal and Estuarine Morphodynamics: RCEM 2009. Taylor & Francis Group, London, Universidad Nacional del Litoral, Santa Fe, Argentina, pp. 51-56.
- Sandbach, S.D., Hardy, R.J., **Lane, S.N.**, Parsons, D.R., Best, J.L., Ashworth, P.J., Reesink, A.J.H., Amsler, M.L., Szupiany, R.N., Nicholas, A.P., Orfeo, O. and Sambrook-Smith, G.H., 2010. Three-dimensional modelling of a very large river: the Rio Parana In Proceedings of the IAHR River Flow Conference. Bundesanstalt fuer Wasserbau, 409-417

#### 2012

Kearnes, M., Klauser, F. and Lane, S.N., 2012. Risk Research after Fukushima. Chapter 1 in Kearnes, M., Klauser, F. and Lane, S.N., *Critical Risk Research: Practices, Politics and Ethics,* Wiley, Chichester, 1-21.

- Lane, S.N., 2012. Ethical risk management, but without risk communication? Chapter 8 in Kearnes, M., Klauser, F. and Lane, S.N., *Critical Risk Research: Practices, Politics and Ethics*, Wiley, Chichester, 151-72
- Lane, S.N., Klauser, F. and Kearnes, M., 2012. Reflections on 'Critical' Risk Research. Chapter 11 in Kearnes, M., Klauser, F. and Lane, S.N., *Critical Risk Research: Practices, Politics and Ethics*, Wiley, Chichester, 219-36.
- Lane, S.N., 2012. Making mathematical models perform in geographical space(s). Chapter 17 in Agnre, J. and Livingstone, D. Handbook of Geographical Knowledge. Sage. London.
- Odoni, N. and Lane, S.N. 2012. Mathematical models: from concepts to simulation. For Gregory K.J. et al. (ed) Handbook of Geomorphological Knowledge
- Whatmore, S.J. and Lane, S.N. 2012. Connaissances controversées: exploration dans les sciences et les politiques des risques d'inondation. Forthcoming in November, V. et al. Habiter les territoires à risqué.

Lane, S.N., 2013. Working with controversies in hydrology and hydraulic science. In Arnaud-Fassetta, G. (ed) *Hydrosystèmes continentaux* et territoires européens confrontés aux différentes lois sur l'eau

### **Professional Journal Papers**

- Hicks, D.M., Lane, S.N. and Westaway, R.M., 1999. A metric eye in the sky: Photogrammetric tools for riverbed surveys. *Water and Atmosphere*. **7**, 24-7
- Lane, S.N. 2001. The Yorkshire floods of November 2000: are thing really getting any worse? Regional Review.
- Hicks, D.M., Westaway, R.M., Lane, S.N., 2003. A bird's-eye assessment of gravel movement in large braided rivers. *Water & Atmosphere*, 11, 21-23.
- Lane, S.N., 2006. Catchment-scale approaches to restoring rivers with coarse sediment problems. *River Restoration Centre Newsletter*, 23, 6-7.

#### **Book Reviews**

Best, J. and Bristow, C. (eds.), 1993. Braided Rivers. Geological Society Special Publication 75, Geological Society,

Burlington House. In Earth Surface Processes and Landforms, 20, 774-5.

Beven, K.J., Chatwin, C. and Millbank, P. (eds.) 1994. *Mixing and Transport in the Environment*. Wiley, Chichester. In *Earth Surface Processes and Landforms*, **21**.

Hinio, M. (ed.), 1994. *Water Quality and its Control*. International Association for Hydraulics Research. Hydraulic Structures Design Manual 5, Balkema, Rotterdam. In *Earth Surface Processes and Landforms*, **21**.

Vreugdenhill, C.B., 1994. *Numerical methods for shallow-water flow*. Kluwer Academic, Water Science and Technology Library 13, Dordrecht. In *Earth Surface Processes and Landforms*, **22**, 1083.

O'Riordan, T. (ed.), 1995. Environmental Science for Environmental Management, Longman, Essex. In Geographical Journal.

Anderson, M.G., Walling, D.E. and Bates, P.D., 1996. Floodplain Processes. Zeitshcrift fur Geomorphologie, 42, 113-5.

Ashworth, P.J. Bennett, S.J., Best, J.L. and McLelland, S.J. 1996. Coherent Flow Structures in Open Channels, Earth Surface Processes and Landforms (in press)

Carling, P.A. and Dawson, M.R. 1996. Advances in Fluvial Dynamics and Stratigraphy. Earth Surface Processes and Landforms Newson, M.D. 1997. Land, Water and Development: Sustainable Management of River Basin Systems, Routledge, London. Earth Surface

Processes and Landforms
Chanson, H. 1999. The Hydraulics of Open Channel Flow, Arnold, London. Environmental and Conservation
Gregory, K.J., 2003. The Changing Nature of Physical Geography, Arnold, London, Progress in Physical Geography

## Refereeing for Journals

Area

ASCE Journal of Hydraulic Engineering

Bulletin of the Geological Society of America

Catena

Computers and Geosciences

Earth Surface Processes and Landforms

Edited Volumes

Experiments in Fluids

. Fennia

Geomorphology

Geoscience and Remote Sensing Letters

Hydrological Processes

Hydrology and Earth System Science

International Journal of Geographical Information Science

International Journal of Remote Sensing

Journal of Geophysical Research – Atmosphere

Journal of Geophysical Research - Earth Surface

Journal of Hydrology
Journal of River Basin Management
Journal of Sedimentary Research
Mathematical Geology
Natural Hazards
Photogrammetric Record
Progress in Physical Geography
Quaternary Science Reviews
Science of the Total Environment
Sedimentary Geology
Sedimentology
Transactions in GIS
Transactions of the Institute of British Geographers
Water Resources Research
Zeitschrift fur Geomorphologie

## **Conferences and Seminars**

#### Invited Lectures, including keynotes, papers and seminars

#### Industry

Keynote Lecture, Willis Global Clients Meeting, Bermuda, 2007 Keynote Lecture, Willis Global Clients, Teleconference, 2007

Keynote Lecture, Willis UK Clients, Teleconference, 2007

Keynote Lecture, Royal Sun Alliance Annual Conference, London, 2007 Keynote Lecture, Lake District Still Water Partnership, Windermere, 2007

Invited seminar, Environment Agency, Cardiff, November 2008

Keynote review, AIR Flood Model, London, 2008

Keynote Lectures (2), Willis Global Clients Conference, London, 2008

Invited seminar, Envionment Agency, Bristol, September 2009

Conference Chair, London's Flood Futures, London, 2009

Keynote Lecture, Willis Global Clients Meeting, London, 2010

## Academic conferences and meetings

Invited paper, Gravel Bed Rivers IV, 1995, Washington State, USA (International Workshop)

Invited paper, Institute if British Geographers 1996, Glasgow (International Conference)

Keynote paper, Joint meeting of the Photogrammetric Society and the Royal Institute of Chartered Surveyors, 2000, London (Discussion Meeting)

Keynote Lecture, Gravel Bed Rivers V, 2000, New Zealand (International Workshop)

Invited paper, Remote Sensing Society Special Interest Groups on Modelling and Advanced Techniques (MATSIG) and Geographical Information Systems (GISSIG), 2000 (National Workshop)

Invited paper, Fundamentals of Fluid Flow, BP Institute, Cambridge University, 2002 (National Workshop)

Keynote Lecture, Braided Rivers 2 Meeting, 2003, Birmingham (International Workshop)

Invited paper, Royal Geographical Society, 2003, Annual Conference (International Conference)

Invited paper, CIWEM National Conference 2003, Harrogate (National Conference)

Invited papers (2), European Geophysical Union 2005, Vienna (International Conference)

Invited paper, Royal Geographical Society, 2005, Annual Conference (International Conference)

Keynote Lecture, Rural Economy and Land Use Programme Annual Conference, 2006 (National Conference)

Keynote Lecture, Young Hydrologists meeting of the British Hydrological Society, 2006 (National Workshop)

Invited paper, International Atlantic Salmon Workshop, Newcastle 2006 (International Workshop)

Invited paper, Yorkshire Forward meeting on biodiversity in a changing climate (National Workshop)

Keynote Lecture, Climate Change 2007, London (International Conference)

Keynote Lecture, Hydralab, Lisbon, 2007 (International Workshop)

Keynote Lecture, Landform, Bonn, 2007 (International Conference)

Keynote Lecture, Spatial Modelling, Manchester, 2007 (International Conference)

Keynote Lecture, British Society for Geomorphology Annual Conference, Birmingham, 2007 (International Conference)

Keynote Lecture, British Hydrological Society Workshop, London, 2007 (National Workshop)

Invited paper, Language and interdisciplinary in Hazard and Risk Research, Durham, 2008 (International Workshop)

Schools Lecture, Hazards Day, Manchester, 2008 (650 students)

Keynote Lecture, Association of Rivers Trusts, Bakewell, 2008 (National Workshop)

Keynote Lecture, ALFA meeting, Penrith, 2008 (International Workshop)

Invited papers (2), European Geoscience Union, Vienna, 2008 (International Conference)

Invited paper, American Geophysical Union, San Francisco, 2009 (International Conference)

Invited Lecture, RELU Annual Conference, London, 2009 (National Conference)

Invited paper, ESRC-NERC Hazards Workshop, Norwich, 2009 (National Workshop)

Invited paper, Habiter les territoires à risqué, Lausanne, 2009 (International Workshop)

Keynote Lecture, Geographical Association Annual Conference, manchester, 2009 (National Conference)

Invited papers (3) and invited discussant, European Geoscience Union, Vienna, 2009 (International Conference)

Keynote Lecture, Great North Meet of the Royal Agricultural Society, 2009 (National Conference)

Keynote Lecture, Water.Risk, Durham, 2010 (International Workshop)

Keynote Lecture, Geographical Association Annual Conference, Derby, 2010 (National Conference)

Keynote Lecture, EPFL-ENAC Research Day, Lausanne, 2010 (International Meeting)

Invited Lecture, Royal Society of London Theo Murphy Meeting, Milton Keynes, 2010 (International Workshop)

Invited Discussant, *Tipping Points*, Annual Conference of the RGS-IBG, London, 2010 (International Conference)

Ralph Alger Bagnold Lecture, EGU, April 2011

Keynote Lecture and Discussant, EGU Union Session, April 2011

Invited Papers (2), EGU, April 2011

Invited Paper, Reviewing in Geomorphology, April 2011

Evening Lecture, RGS-IBG, November 2011

Keynote Lecture, RGS-IBG, August 2011

Keynote Lecture, RELU End of Programme meeting, Newcastle, Novemebr 2011

Keynote Lecture, Belgium workshop on publica participation, November 2011

Keynote Lecture, Oxford workshop on interdisciplinarity, January 2012

Invited paper, Authoring in Geomorphology, European Geoscience Union, April 2012

Posters (2), European Geosciences Union, April 2012

Invited paper, Authoring in Geomorphology, British Society for Geomorphology Annual Meeting, June 2012

Keynote Lecture, International Society for Photogrammetry and Remote Sensing Congress, Melbourne, Australia, August 2012

Papers (4), Posters (5), European Geoscience Union, April 2013

Papers (4), Posters (4), International Association of Geomorphologists, Paris, Août 2013

Invited paper, Authoring in Geomorphology, British Society for Geomorphology Annual Meeting, September 2012

Invited lecture, British Society for Geomorphology Annual Meeting, September 2012

### **Higher Education Institutions**

Seminar, Department of Geography, University of Portsmouth. December 7th 1994.

Seminar, Department of Geography, University of Bristol. December 6th 1994.

Seminar, Indian Institute of Technology, Kanpur, India, 3rd March 1995.

Seminar, Department of Geography, University of Nottingham, November 28th 1996.

Seminar, Department of Geography, School of Oriental and African Studies, University of London,

November 18th 1997.

Seminar, Department of Geography, University of Cambridge, February 6th 1997.

Seminar, Department of Geography, University of Canterbury, New Zealand, October 1998.

Seminar, National Institute of Water and Atmospheric Research, New Zealand, October 1998.

Public Lecture, National Institute of Water and Atmospheric Research, New Zealand, September 1998.

Seminar, Department of Geography, University of Southampton, 22nd April 1998.

Seminar, Department of Geography, University of Montreal, Canada, 2nd April 1998.

Jan de Ploey Memorial Lecture, Catholic University of Leuven, Belgium, 12th February 1998.

Seminar, Laboratory for Experimental Geomorphology, Catholic University of Leuven, Belgium, 11th

February 1998.

Seminar, Department of Geography, University of Cambridge, December 1999.

Invited lecture, Birmingham Geographical Association, November 1999.

Seminar, National Institute of Water and Atmospheric Research, New Zealand, September 1999.

Seminar, Department of Geography, University of Leeds, March 1999.

Seminar, Department of Geography, University College, London, March 1999.

Seminar, Department of Geography, University of Hull, February 2000.

Seminar, Department of Geography, University of Durham, February 2000.

Seminar, Department of Geography, University of Sheffield, February 2000.

Seminar, Department of Geography, King's College, London, January 2000.

Seminar, Department of Geography, University of Leeds, March 2001.

Invited lecture, Yorkshire Geographical Association, November 2002.

Seminar, Department of Geography, University of Illinois at Champaign-Urbana, September 2002

Seminar, Department of Geography, University of Manchester, February 2002

Seminar, Department of Geography, University of Bristol, February 2002

Seminar, Department of Geography, University of Birmingham, January 2002

Seminar, Department of Geography, University of Oxford, November 2003

Seminar, Department of Geography, Queen Mary and Westfield College, London, October 2003

Seminar, Department of Geography, University of Dundee, October 2003

Invited lectures, NERC Geophsyical Fluid Dynamics Summer School, DAMTP, University of Cambridge, September 2003

Seminar, INRS-Géoresources, Québec, March 2003

Seminar, Department of Geography, University of Nottingham, February 2003

Seminar, Department of Geography, University of Aberdeen, November 2004

Seminar, Department of Civil Engineering. University of Newcastle, November 2004

Seminar, Département de Géographie, Université de Montréal, March 2004

Seminar, Department of Geography, Exeter University, November 2005

Seminar, Department of Geological Sciences, Imperial College, February 2005

Seminar, Department of Geography, Leicester University, November 2006

Seminar, Department of Geography, University of Manchester, February 2007

Seminar, Department of Geography, University of Hull, October 2007

Seminar, Hutton Club, Edinburgh University, October 2007

Public lecture, Newcastle University, May 2008

Seminar, School of Engineering, Exeter University, January 2009

Seminar, ENAC, EPFL Lausanne, Switzerland, March 2009

Seminar, Department of Geography, Southampton University, May 2010

Seminar, Department of Geography, University of Birmingham, October 2010

Seminar, Catchment Science Centre, Sheffield University, December 2010

Seminar, Société des Sciences Naturelles Vaudoises, April 2011

Seminar, ETH Zürich, May 2011

Seminar, University of Neuchâtel, December 2011

Seminar, University of Berne, December 2011

Seminar, University of Basel, May 2012

Seminar, University of Zürich, October 2012

Seminar, University of Neuchâtel, November 2012

Seminar, King's College London, May 2013

### **Additional Conference Presentations**

#### 1992

Lane, S.N., Richards, K.S. and Warburton, J. (1992) Presented at Turbulence: Perspectives on Flow and Sediment Transport. University of Hull, April 1992

#### 1993

- Clifford, N.J., Richards, K.S. and Lane, S.N. (1993) Presented at the British Geomorphological Research Group Annual Conference, Birmingham, 18-19 September 1993
- Lane, S.N., Richards, K.S. and Chandler, J.H. (1993) Presented at the Third International Geomorphology Conference, Hamilton, Canada. 23-28 August 1993
- Lane, S.N., Richards, K.S. and Chandler, J.H. (1993) Presented at the British Geomorphological Research Group Annual Conference, Birmingham, 18-19 September 1993
- Richards, K.S., Arnold, N., Chandler, J.H., Chandra, S., **Lane, S.N.** and Mattikalli, N. (1993) Presented at the Third International Geomorphology Conference, Hamilton, Canada, 23-28 August 1993

#### 1994

- Lane, S.N. (1994) Presented to the British Geomorphological Research Group Postgraduate Symposium, Glasgow, 15-16 March 1994
- Clifford, N.J., Lane, S.N. and Richards, K.S., 1995. European Geophysical Society, Annales Geophysicae, 14, Supplement II, C330.
- Lane, S.N., and Richards, K.S. (1995) Presented at a special conference on Coherent flow structures in open channels: origins, scales and interactions with sediment transport and morphology, Leeds, 10-12 April 1995

## 1996

- Lane, S.N. and Richards, K.S., 1996. European Geophysical Society, Annales Geophysicae, 14, Supplement II, C329.
- Lane, S.N., Chandler, J.H. and Butler, J (1996) Presented at the Institute of British Geographers Annual Meeting, University of Strathclyde, January 1996.
- Lane, S.N. and Richards, K.S (1996) Presented at the 21st Congress of the European Geophysical Society, The Hague, Netherlands, May 1996
- Lane, S.N., Clifford, N.J. and Richards, K.S (1996) Presented at the 21st Congress of the European Geophysical Society, The Hague, Netherlands, May 1996.
- Lane, S.N. and Roy, A.G (1996) Presented at the ADV User Group Workshop, HR Wallingford, Oxfordshire, October 1996.
- Bradbrook, K.F., Biron, P., Lane, S.N., Richards, K.S., Roy, A.G. (1997a) Presented to the 22nd Congress of the European Geophysical Society, Vienna, Austria, April 1997.
- Bradbrook, K.F., Biron, P., Lane, S.N., Richards, K.S., Roy, A.G. (1997b) Presented to the 22nd Congress of the European Geophysical Society, Vienna, Austria, April 1997.
- Lane, S.N. and Bates, P.D (1997) Presented to the 22nd Congress of the European Geophysical Society, Vienna, Austria, April 1997.
- Lane, S.N., Abdel-Motaal, D., Richards, K.S., Sinha, S., Wu, S-Y. (1996) Presented at the Royal Geographical Society-Institute of British Geographers Annual Conference, Exeter, January 1997.
- Reeves, A.N., **Lane, S.N**., and Richards, K.S. (1997) Paper presented to the 4<sup>th</sup> Conference of the International Association of Geomorphologists, Bologna, August 1997.
- Reeves, A.N., Lane, S.N., and Richards, K.S. (1997) Presented to the 22nd Congress of the European Geophysical Society, Vienna, Austria, April 1997.

- Bradbrook, K.F., **Lane, S.N.**, Richards, K.S (1998) Poster presented to the American Geophysical Union Fall Meeting, San Francisco, December 1998.
- Bradbrook, K.F., Lane, S.N., Richards, K.S., Biron, P.A. and Roy, A.G. (1998) Paper presented to the Royal Geographical Society-Institute of British Geographers Annual Conference, Kingston University, January 1998.
- Butler, J. B., Lane, S.N., Chandler, J.H (1998) Poster presented to the American Geophysical Union Fall Meeting, San Francisco, December 1998.
- Crowell, M.D. and Lane, S.N. (1998) Paper presented to the Annual Meeting of the American Association of Geographers, Boston, April 1998.

- Crowell, M.D. and Lane, S.N. (1998) Paper presented to the Royal Geographical Society-Institute of British Geographers Annual Conference, Kingston University, January 1998.
- Lane, S.N., Biron, P.A., Bradbrook, K.F., Chandler, J.H., Richards, K.S. and Roy, A.G. (1998) Paper presented to the Royal Geographical Society-Institute of British Geographers Annual Conference, Kingston University, January 1998.
- Lane, S.N., Bradbrook, K.F., Caudwell, S., Richards, K.S. (1998) Paper presented to the American Geophysical Union Fall Meeting, San Francisco. December 1998.
- Lane, S.N., Bradbrook, K.F., Richards, K.S., Biron, P.A. and Roy, A.G.(1998) Paper presented to the Annual Meeting of the American Association of Geographers, Boston, April 1998.

- Hicks, D.M., Westaway, R.M. and Lane, S.N. (1999) Paper presented to the New Zealand Hydrological Society, November 1999
- Lau, S.S.S and Lane, S.N. (1999) Paper presented at the Society of Wetland Scientists 20th Annual Meeting, Norfolk, Virginia, June 1999
- Lau, S.S.S. and Lane, S.N. (1999) Paper presented at the Freshwater Biological Association annual scientific meeting, Ambleside, Cumbria, July 1999.
- Lau, S.S.S. and Lane, S.N. (1999) Paper presented at the RUCA Conference, University of Antwerp, August 1999.
- Lane, S.N., Hicks, D.M., Westaway, R.M. and Duncan, M.J. (1999) Poster presented at the Image and Vision Computing Conference, University of Canterbury, Christchurch, New Zealand, August 1999.
- Lane, S.N., Reeves, A.N. (1999) Paper presented to the Bristol Water Science Meeting, September 1999.
- Lane, S.N. and Bradbrook, K.F. (1999) Paper presented at the BGRG Annual Conference, University of Hull. September 1999.
- Westaway, R.M., Hicks, D.M. and Lane, S.N. (1999) Paper presented to the New Zealand Hydrological Society, November 1999
- Westaway, R.M., Lane, S.N., Hicks, D.M. and Duncan, M.J. (1999) Poster presented at the BGRG Annual Conference, University of Hull, September 1999.

### 2000

- Hicks, D.M., Duncan, M.J., Westaway, R.M., Lane, S.N. (2000) Poster presented to the 5th Gravel-Bed Rivers Conference, Christchurch, New Zealand. September 2000
- Hicks, D.M., Westaway, R.M. and Lane, S.N. (2000) Paper presented to the 25th Congress of the European Geophysical Society, Nice, April 2000
- Lane, S.N. and James, T.D. (2000) Paper presented to the 25th Congress of the European Geophysical Society, Nice, April 2000
- Lane, S.N., Bradbrook, K.F., Biron, P.M., Caudwell, S.W.B., Ferguson, R.I., Hardy, R.J., Keylock, C.J., Hardy, R.J., Parsons, D., Richards, K.S. and Roy, A.G. (2000) Paper presented to the British Geomorphological Research Group Annual Conference, University of Sheffield. September 2000
- Lane, S.N., Reeves, A.N. and Richards, K.S. (2000) Poster presented to the 5th Gravel-Bed Rivers Conference, Christchurch, New Zealand, September 2000
- Lane, S.N., Westaway, R.M., Hicks, D.M. and Duncan, M.J. (2000) Paper presented at the Annual Conference of the Remote Sensing Society, University of Leicester, September 2000
- Parsons, DR, Ferguson, RI, Lane, S.N., and Hardy, RJ. (2000) British Geomorphological Research Group Conference, University of Glasgow, April 2000
- Tabone-Adami, E., Lane, S.N. and Axiak, V. (2000) Paper presented at the Annual Conference of the Remote Sensing Society, University of Leicester, September 2000
- Westaway, R.M., Lane, S.N., Hicks, D.M. and Duncan, M.J. (2000) Poster presented to the 5th Gravel-Bed Rivers Conference, Christchurch, New Zealand, September 2000

- Carbonneau, P., Lane, S.N. and Bergeron, N. (2001) Paper presented to the Canadian Geomorphological Research Group, Montreal, June 2001.
- Carbonneau, P., Lane, S.N. and Bergeron, N. (2001). Paper presented to the Remote Sensing and Photogrammetry Society, London, September 2001.
- Carbonneau, P.E., Bergeron, N.F and Lane, S.N. (2001) Paper presented to the Annual Meeting of the Association of American Geographers, New York, February 2001.
- Hardy, R.J., Elliot, L., Ingham, D.B. Lane, S.N. and Lawless, M. (2001). Poster presented to the British Geomorphological Research Group, Nottingham, September 2001.
- Hardy, R.J., **Lane, S.N.**, Ferguson R. and Parsons D. (2001) Paper presented to the American Geophysical Union, Spring Meeting, Boston, May 2001.
- Hardy, R.J., Lane, S.N., Ferguson, R. and Parsons, D.R. (2001) Meeting of the American Geophysical Union, 28<sup>th</sup> May to 1 June, 2001, Boston Eos, Transactions, Vol 82, Number 20
- Hardy, R.J., Lane, S.N., Ingham, D.B., and Elliott, L. (2001) Paper presented to the Canadian Geomorphological Research Group, Montreal, June 2001.
- Lane, S.N. (2001) Paper presented to the American Geophysical Union, Spring Meeting, Boston, May 2001.
- Lane, S.N. (2001) Paper presented to the Canadian Geomorphological Research Group, Montreal, June 2001.
- Lane, S.N. (2001) Paper presented to the PLACE conference on Global Warming: A Yorkshire Perspective, York, November 2001.
- Lane, S.N., Chandler, J.H. and Porfiri, K. (2001) Paper presented to the Annual Meeting of the Association of American Geographers, New York, February 2001.
- Lawless, M., Hardy, R.J., Lane, S.N. and Best, J.L. (2001). Paper presented to the British Geomorphological Research Group, Nottingham, September 2001.

- Parsons, DR, Ferguson, RI, Lane, S.N., and Hardy, RJ. (2001) British Geomorphological Research Group Conference, University of Portsmouth, April, 2001.
- Parsons DR. Ferguson RI, Lane, S.N. and Hardy, RJ. (2001). British Geomorphological Research Group Conference, Nottingham, September 2001.
- Parsons, DR, Ferguson, RI, Lane, S.N., and Hardy, RJ. (2001) Spring meeting of the American Geophysical Union, Spring Meeting, Boston, May 2001
- Westaway, R., Lane, S.N. and Hicks, D.M. (2001) Paper presented to the Canadian Geomorphological Research Group, Montreal, June 2001.
- Westaway, R.M., **Lane, S.N.** and Hicks, D.M. (2001) Paper presented to a joint meeting of the Photogrammetric Society and the British Geomorphological Research Group, University of Leeds, January 2001.
- Westaway, R.M., Lane, S.N. and Hicks, D.M. (2001) Paper presented to the Annual Meeting of the Association of American Geographers, New York, February 2001.

- Hardy, R.J., Lane, S.N., Ferguson, R.I. and Parsons, D.R. (2002) Paper presented to a CFD session at the BGRG Research Annual meeting. Leeds, September 2002
- Hardy, R.J., Lane, S.N., Ingham, D.B. and Elliott, L. (2002) Meeting of the BHS entitled River bed patches: hydraulic, ecology and geomorphology. Department of Geography, Loughborough University, May 2002
- Hardy, R.J., Lane, S.N., Ingham, D.B. and Elliott, L. (2002) Poster presented at session at the BGRG Research Annual Meeting, Leeds, September 2002
- Keylock, C.J., Lane, S.N., Richards, K.S. and Hardy, R.J. (2002) Paper presented to a CFD session at the BGRG Research Annual meeting, Leeds, September 2002
- Lane, S.N. (2002) Paper presented to the Environment Agency workshop on Gravel Management, Wharfedale, North Yorkshire, December 2001.
- Lane, S.N., Hardy, R.J., Ferguson, R.I. and Parsons, D.R. (2002) Poster presented at the BGRG Research Annual Meeting, Leeds, September 2002
- Lane, S.N., Hardy, R.J., Ingham, D.B., Elliot, L., Ferguson, R.I. and Parsons, D.R. (2002) Paper presented to a CFD session at the BGRG Research Annual meeting, Leeds, September 2002
- Lane, S.N., James, T.D. and Saunders, M. (2002) Paper presented to the Thompson Symposium of the Remote Sensing and Photogrammetry Society, Loughborough, April 2002.
- Lane, S.N., Westaway, R.M. and Hicks, D.M. (2002) Paper presented to the Thompson Symposium of the Remote Sensing and Photogrammetry Society, Loughborough, April 2002.
- Parsons, DR, Ferguson, RI, Lane, S.N., and Hardy, RJ. (2002) Topographic representation in numerical flow modelling. Paper presented to a British Geomorphological Research Group Symposium, University of Leeds, April 2002.
- Parsons, DR, Ferguson, RI, Lane, S.N. and Hardy, RJ. (2002). Paper presented at British Sedimentological Research Group, University of East Anglia, Norwich.
- Parsons, D.R., Ferguson, R., Lane, S.N. and Hardy, R.J. (2002) Meeting of the BHS entitled River bed patches: hydraulic ecology and geomorphology. Department of Geography, Loughborough University, 8 May, 2002
- Parsons, D.R., Ferguson, R., Lane, S.N. and Hardy, R.J. (2002) Paper presented to a CFD session at the BGRG Research Annual meeting, Leeds, September 2002
- Tayefi, V., Lane, S.N., Hardy, R.J., Brooks, C.J. and Reid, S.C. (2002) Poster presented at the BGRG Research Annual meeting, Leeds, September 2002

#### 2003

- Carbonneau, P. and Lane, S.N. (2003). Paper presented to the Annual Conference of the British Geomorphological Research Group, University of Oxford.
- Hardy, R.J., **Lane, S.N.**, Ferguson, R.I. and Parsons, D.R. (2003). Paper presented to the Annual Conference of the British Geomorphological Research Group, University of Oxford.
- Lane, S.N., Brookes, C., Kirkby, M.J. and Holden, J. (2003). Paper presented to the Annual Conference of the British Geomorphological Research Group, University of Oxford.
- Lane, S.N., Hardy, R.J., Keylock, C.J., Ferguson, R.I. and Parsons, D. (2003). Paper to be presented at the Shallow Flows 2003 meeting, Delft Hydraulics, The Netherlands.
- Lane, S.N., Haycock, N. and Chalk, L. (2003). Paper presented to the Annual Conference of the River Restoration Centre, April 2003.
- Lawless, M.R., Lane, S.N. and Best, J.L. (2003). Paper presented at the Shallow Flows 2003 meeting, Delft Hydraulics, The Netherlands.
- Schindler, R., Lane, S.N., Keylock, C.J. and Naden, P.S. (2003). Poster presented at the Shallow Flows 2003 meeting, Delft Hydraulics, The Netherlands.

- Carbonneau, P, Francis, B, Bergeron, N and Lane, S N (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Hardy, R J, **Lane, S.N.**, Ferguson, R I and Parsons, D R (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Hunt, R.M., Lane, S.N., Hardy, R.J, Ingham, D.B., Elliot, L. Wen, X. Whitting, P.J. (2004). Paper presented to the American Geophysical Union, 2004 Joint Assembly, Montreal, May 2004
- Lane, S N (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Lane, S N and Brookes, C J (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.

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- Lawless, M R, Lane, S N, Best, J L (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Mould, D C, Lane, S N and, Christmas, M (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Orfeo, O., Best, JL, Parsons, DR, Lane, S.N., Kostaschuck, R, Hardy, RJ, Franklin, M, Roberts, M and Fraser, J. (2004). Reunión Argentina de Sedimentología, San Luis, 1st to 3rd of September 2004.
- Parsons, D R, Best, J L, Lane, S N, Kostaschuck, R, Orfeo, O and Hardy, R J (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Schindler, R J, Lane, S N, Keylock, C J, Best, J, Naden, P S (2004) Paper presented to the American Geophysical Union Joint Assembly, Montreal, May 2004.
- Tayefi, V, Lane, S.N., Hardy, RJ, and Yu, D (2004). Paper presented to the American Geophysical Union Western Pacific Geophysics Meeting, Honolulu, Hawaii, 2004.

- Best, JL, Parsons, DR, Lane, S.N., Kostaschuk, R. Orfeo, O and Hardy, RJ. (2005). Paper presented to the 8th International Conference on Fluvial Sedimentology, Delft University of Technology, August, 2005.
- Best, J.L. Parsons, D.R. Lane, S.N. Amsler, M.L., Kostaschuk, R., Orfeo, O., and Hardy, R.J. (2005). Paper presented to the British Sedimentological Research Group, Annual Meeting, Durham, December 2005.
- Casas, A., Hardy RJ., **Lane, S.N.** and Whiting, PJ (2005). 6th International Conference on Geomorphology, 7th 11th September, Zaragoza, Spain.
- Hardy RJ, Lane, S.N., Carbonneau PE and Best JL. (2005). Gravel Bed Rivers VI. 5-9th September 2005.
- Hardy RJ., Parsons DR., Best JL., **Lane, S.N.**, Kostaschuk R. and Orfeo O. (2005). British Sedimentological Research Group, Annual Meeting, Durham, 2005.
- Lane, S.N., Tayefi V, Reid S C, Yu D. (2005) Paper presented to the RGS Annual Conference, London, August 2005.
- Lane, S.N., Donaldson, A., Heathwaite, A.L., Ward, N and Whatmore, S.L. (2005) Paper presented to the RELU Workshop, May 2005.
- Lane, S.N.; Heathwaite, AL; Brookes, CJ (2005) Paper presented to the European Geosciences Union, Vienna, April 2005.
- Parsons, DR, Best, JL, Lane, S.N., Kostaschuk, R. Orfeo, O and Hardy, RJ. (2005). International Conferences on Fluvial Sedimentology, Delft University of Technology 7th-12th August, 2005.
- Parsons, DR, Best, JL, **Lane, S.N.**, Kostaschuk, R. Orfeo, O and Hardy, RJ. (2005). River Coastal and Estuarine Morphodynamics. (RCEM) University of Illinois at Urbana-Champaign. October, 2005.
- Parsons, DR, Best, JL, **Lane, S.N.**, Kostaschuk, R, Orfeo, O, Shugar, D and Hardy, RJ. (2005). British Sedimentological Research Group, Annual Meeting, Durham, 18th-20th December 2005.
- Reaney, S; Lane, SN (2005) Paper presented to the European Geosciences Union, Vienna, April 2005.
- Reaney, S; Lane, SN (2005) Paper presented to the European Geosciences Union, Vienna, April 2005.
- Reaney, S; Lane, SN; Wade, T; Conlan, K (2005) Paper presented to the European Geosciences Union, Vienna, April 2005.
- Shugar, D. Kostaschuk, R., Best, J.L. Lane, S.N., Parsons, D.R., Orfeo, O. and Hardy, R.J. (2005). Canadian Association of Geography, London, Ontario.
- Yu, D; Lane, SN (2005) Paper presented to the European Geosciences Union, Vienna, April 2005. 2006
- Dugdale, L. and Lane, S.N. (2006) Paper presented to the Annual Symposium of the British Hydrological Society
- Lane, S.N. and Reaney, S. (2006). Paper presented to the Annual Symposium of the British Hydrological Society
- Lane, S.N., Carbonneau, P.E., Bergeron N. (2006) Paper presented to the BSG Annual Conference, Loughborough, June Lane, S.N. (2006). Paper presented to the democratising science workshop, Oxford, July 2006
- Lane, S.N., Hardy, R.J., Yu, D., Tayefi, V. and Reid, S.C., 2006. Paper presented to RiverFlow 2006, Lisbon
- Lane, S.N., Mould, D.C., Carbonneau, P.E., Hardy, R.J. and Bergeron, N.E., 2006. Paper presented to RiverFlow 2006, Lisbon
- Milledge DG, Lane, S.N., Warburton J. (2006) Paper presented at the American Geophysical Union, San Francisco, CA, December 2007
- Milledge DG, Lane, S.N., Warburton J. (2006). Poster presented at the British Society for Geomorphology Annual Meeting, Loughborough, UK, June 2006 (PDF).
- Milledge DG, Lane, S.N., Warburton J. (2006). Poster presented at the meeting Elevation Models for Geosciences, London, UK, March 2006
- Orfeo, O., Parsons, D.R., Best, J.L., Lane, S.N., Hardy, R.J., Kostaschuk, R., Szupiany, R.N. and Amsler, M.L., 2006. Paper presented to *RiverFlow 2006*. Lisbon.
- Parsons, D.R., Best, J.L., Lane, S.N., Hardy, R.J., Kostaschuk, R., Shugar, D. and Orfeo, O., 2006. Paper presented to *RiverFlow 2006*, Lisbon
- Yu, D. and Lane, S.N., (2006). Paper presented to *RiverFlow 2006*, Lisbon 2007
- Best, JL, Parsons, DR, Kellman, P., Amsler, M, Szupiany, R, Kostaschuck, R., Lane, S.N., Hardy, RJ, Orfeo, O (2007). Large River Conference, Santa Fe, Argentina, November 2007.
- Hardy, RJ, Best, J.L. and Lane, S.N. (2007). Fall Meeting of the American Geophysical Union, 2007.
- Lane, S.N. and Mould, D.C., (2007) Paper presented at the European Geosciences Union meeting, Vienna, 2007.
- Lane, S.N. and Reid, S.C., (2007) Paper presented at the European Geosciences Union meeting, Vienna, 2007.
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- Lane, S.N., Reaney, S. and Heathwaite, A.L., (2007). Paper presented at the American Geophysical Union meeting, Vienna, 2007.
- Lane, S.N.; Burt, T.P.; Dixon, J.; Dugdale, L.J.; Heathwaite, A.L.; Maltby, A.; Reaney, S. (2007) Paper presented at the European Geosciences Union meeting, Vienna, 2007.
- Lane, S.N.; Burt, T.P.; Dixon, J.; Dugdale, L.J.; Heathwaite, A.L.; Maltby, A.; Reaney, S. (2007) Poster presented at the European Geosciences Union meeting, Vienna, 2007.
- Milledge DG, Lane, S.N., Warburton J. (2007). Paper presented at American Geophysical Union Fall Meeting, San Francisco, CA, December 2007 (PDF).
- Milledge DG, Lane, S.N., Warburton J. (2007). Paper presented at Remote Sensing and Photogrammetry Society Annual Meeting, Newcastle, UK, September 2007.
- Milledge DG, Lane, S.N., Warburton J. (2007). Paper presented at the British Society for Geomorphology Annual Meeting, Birmingham, UK, July 2007
- Miori, S, Hardy, RJ, Bertoldi, W, Lane, S.N. (2007). Paper presented at the Fall Meeting of The American Geophysical Union, 2007.
- Orfeo, O, Parsons, DR, Best, JL, **Lane, S.N.** Hardy, RJ, Kostaschuck, R (2007). Paper presented at the Large River Conference, Santa Fe, Argentina, November 2007.
- Parsons, DR, Best, JL, Lane, S.N., Thomas, RE, Keevil, G and Hardy, RJ (2007) Poster presented at the Fall Meeting of The American Geophysical Union, 2007.
- Parsons, DR, Shugar, D, Best, JL, Hardy, RJ, Kostaschuk, R, Lane, S.N. and Orfeo, O (2007). paper presented at the Fall Meeting of The American Geophysical Union, 2007.
- Reaney, S. Lane, S.N. and Heathwaite, A.L., (2007). Poster presented at the European Geosciences Union meeting, Vienna, 2007.
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- Yu, D, Lane, S.N., Hardy, RJ, Best, JL, Parsons, DR, Keevil, G and Thomas, RE (2007). Flow structure in a bifurcation: CFD modeling and validation. Fall Meeting of The American Geophysical Union, 2007.
- Yu and Lane, S.N., (2007) Poster presented at the European Geosciences Union meeting, Vienna, 2007.

- Ashworth, P.J., M. Amsler, J.L. Best, R.J. Hardy, **Lane, S.N.**, A.P. Nicholas, O. Orfeo, N.O. Parker, D.R. Parsons, C. Ramonell, A.J.H. Reesink, G.H. Sambrook Smith, S. Simmons & R. Szupiany (2008). Paper presented at the Annual Meeting of the British Geomorphoogical Society Meeting. Exeter.
- Hardy RJ, Parsons DR., Lane, S.N., Best JL., Orfeo O. and Kostaschuk R. (2008). Paper presented at the MARID conference, Leeds 2008. Hardy RJ., Parsons DR., Lane, S.N., Best JL., Orfeo O. and Kostaschuk R. (2008). Paper presented at the Annual Meeting of the British Geomorphoogical Society Meeting. Exeter.
- Kostaschuk, R., Shugar D., Best, J.L., Parsons, D.R. Lane, S.N. Hardy, R.J. & Orfeo, O. (2008). Paper presented at the MARID conference, Leeds 2008.
- Lane, S.N., Parsons, D., Best, J.L., Orfeo, O., Kostachuk, R., Hardy, R.J., (2007). Paper presented to the Annual Meeting of the British Society for Geomorphology, Exeter.
- Lane, S.N.; Bradley, S.; Landstrom, C.; Odoni, N.; Ward, N.; Whatmore, S. (2008) Paper presented at the European Geosciences Union meeting, Vienna, 2008.
- Lane, S.N.; Buckley, C.P.; Heathwaite, A.L.; Reaney, S.M. (2008) Poster presented at the European Geosciences Union meeting, Vienna, 2008.
- Lane, S.N.; Mould, D.C. (2008) Paper presented at the European Geosciences Union meeting, Vienna, 2008.
- Lane, S.N.; Odoni, N. (2008) Paper presented at the European Geosciences Union meeting, Vienna, 2008.
- Nicholas, AP, Amsler, ML, Ashworth, PJ, Best, JL, Hardy, RJ, Lane, S.N., Orfeo, O, Parker, NO, Parsons, DR, Reesink, AJH, Sambrook Smith, GH, Sandbach, S, Simmons, S. and Szupiany, RN (2008). Paper presented at the Annual Meeting of the British Geomorphoogical Society Meeting. Exeter.
- Odoni, N. A.; Lane, S.N. (2008) Paper presented at the European Geosciences Union meeting, Vienna, 2008.
- Pattison, I. Lane, S.N., Hardy, RJ and Reaney, S. (2008) Paper presented at the British Hydrological Society Annual Meeting. Exeter.
- Reesink, A.J.H., Amsler, M.L., Ashworth, P.J.A., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Sambrook-Smith, G.H., Sandbach., S., Szupiany, R. (2008) Paper presented at the Annual British Sedimentological Research Group Meeting, University of Liverpool, December 2008.
- Sandbach SD, Parsons DR, Keevil GM, Best JL, **Lane S.N**., Thomas RE, and Hardy, R J. (2008) Flow structures, sediment transport and controls at river bifurcations: a laboratory flume experiment. The 7th Euromech Fluid Mechanics Conference, Manchester.
- Sandbach SD, Parsons DR, Keevil GM, Best JL, **Lane, S.N**., Thomas RE, and Hardy, R J (2008). Flow structures, sediment transport and controls at river bifurcations: a laboratory flume experiment. BGS meeting. Exeter.
- Waterhouse, E.K., Ferguson, R.I. and Lane, S.N. (2007). Paper presented to the Annual Meeting of the British Society for Geomorphology, Exeter.

## 2009

Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Reesink, A.J.H., Sandbach, S., Sambrook Smith, G.H. and Szupiany, R.N. (2009) Paper presented at 'From River to Rock Record' Conference, University of Aberdeen, 2009.

- Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Reesink, A.J.H., Sambrook Smith, G.H., Sandbach, S.D.and Szupiany, R.N. (2009)Paper presented to the British Geomorphological Society, Annual Conference, Durham University, 2009.
- Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Reesink, A.J.H., Sambrook Smith, G.H., Sandbach, S.D.and Szupiany, R.N. (2009), Paper presented to the 9th International Conference on Fluvial Sedimentology, San Miguel de Tucuman Tucuman, Argentina.
- Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Reesink, A.J.H., Sandbach, S.D. Sambrook Smith, G.H., and Szupiany, R.N. (2009) Paper presented to the Fall Meeting of the American Geophysical Union, 2009.
- Best, J.L. Parsons, D.R., Amsler, M.L., Kostaschuk, R.A., Lane, S.N., Orfeo, O., Szupiany, R.N. and Hardy, R.J. (2009) Paper presented to the 9th International Conference on Fluvial Sedimentology San Miguel de Tucuman, Tucuman, Argentina
- Casas, M., Yu, D., Lane, S.N. and Benito, G., (2009). Poster presented at the American Geophysical Union Fall meeting, 2009
- Holden, J., Kirkby, M.J., Lane, S.N. and Milledge, D.G. (2009) Paper presented at the European Geosciences Union meeting, Vienna, 2009.
- Lane, S.N. (2009a) Paper presented at the European Geosciences Union meeting, Vienna, 2009.
- Lane, S.N. (2009b) Poster presented at the European Geosciences Union meeting, Vienna, 2009.
- Lane, S.N., (2009). Paper presented to a Workshop at the Annual Meeting of the British Society for Geomorphology, Durham, in honour of Rob Ferguson
- Lane, S.N., Best J.L. and Roberts, M., (2009). Paper presented at the American Geophysical Union Fall meeting, 2009
- Lane, S.N., Yu. D., Hardy, R and Hicks D. (2009) Paper presented at the European Geosciences Union meeting, Vienna, 2009.
- Maynard, C., Lane, S.N. and Hardy, RJ (2009). Paper presented to the British Society of Geomorphology Annual meeting, Durham.
- Milledge, D., Heathwaite, L., Lane, S.N. and Reaney, S.M. (2009) Paper presented at the American Geophysical Union Fall meeting, 2009
- Nicholas, A.P., Sandbach, S., Amsler, M.L., Ashworth, P.J., Best, J.L., Hardy, R.J., Lane, S.N., Orfeo, O., Parsons, D.R., Reesink, A.J.H., Sambrook Smith, G.H. and Szupiany, R.N. (2009) Paper presented to the British Society for Geomorphology (BSG) Annual Conference, Durham University, 2009.
- Parsons, D.R., M.L. Amsler, P.J. Ashworth, J.L. Best, R.J. Hardy, **Lane, S.N.**, I.A. Lunt, A.P. Nicholas, O. Orfeo, A.J.H. Reesink, S.D. Sandbach, G.H. Sambrook Smith and R.N. Szupiany (2009) Paper presented to the 6th River Coastal and Estuary Morphodynamics, RCEM 2009, IAHR, Santa Fe, Argentina.
- Parsons, DR, Best, JL, **Lane, S.N**., Orfeo, O. Hardy, RJ, Kostaschuk, R (2009) Paper presented to the 9th International Conference on Fluvial Sedimentology, San Miguel de Tucuman Tucuman, Argentina
- Pattison, I., Lane, S.N., Hardy, R.J. and Reaney, S. (2009a) Paper presented at the European Geosciences Union meeting, Vienna, 2009.
- Pattison, I., Lane, S.N., Hardy, R.J. and Reaney, S. (2009b) Paper presented at the European Geosciences Union meeting, Vienna, 2009.
- Reaney, S.M., Lane, S.N. and Heathwaite, L., (2009). Paper presented at the American Geophysical Union Fall meeting, 2009
- Reesink, A.J.H. Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., **Lane, S.N.**, Nicholas, A.P., Orfeo, O., Parsons, D.R., Sambrook Smith, G.H., Sandbach, S.D., and Szupiany, R.N. (2009) Paper presented to the 9th International Conference on Fluvial Sedimentology, San Miguel de Tucuman, Tucuman, Argentina
- Reesink, A.J.H., Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Sambrook Smith, G.H., Sandbach, S.D. and Szupiany, R.N. (2009) Paper presented to the 'Sediment Body Geometry and Heterogeneity: Analogue Studies for Modelling the Subsurface' Conference. The Geological Society, London, 21-23 October 2009.
- Sandbach, S.D., Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., Lane, S.N., Nicholas, A.P., Orfeo, O., Parsons, D.R., Reesink, A.J.H., Sambrook Smith, G.H. and Szupiany, R.N. (2009), Paper presented to the British Geomorphological Society, Annual Conference, Durham University 7th to 9th September.
- Waterhouse, E.K., Vitolo, Ř., Lane, S.N. and Stephenson, D.B. (2009) Poster presented at the European Geosciences Union meeting, Vienna, 2009.

Lane, S.N. (2010) Paper presented to the ACES Workshop, Aberdeen, October 2010

Raven, E., Vitolo, R., **Lane, S.N.** and Stephenson, D. (2010) Poster presented at the European Geosciences Union meeting, Vienna, 2010. Reesink, A.J.H. Ashworth, P.J., Amsler, M.L., Best, J.L., Hardy, R.J., **Lane, S.N.**, Nicholas, A.P., Orfeo, O., Parsons, D.R., Sambrook Smith, G.H., Sandbach, S.D., and Szupiany, R.N. (2010) Paper presented to the Annual Meeting of the British Society for Geomorphology, London.

## 2011

EGU - Milledge \*\*, AGU

Lane, S.N. (2011) Paper presented to the Hydrosystèmes Colloque, Sion, July 2011.

2012 \*\* EGU, BSG, AGU

2013 EGU, BSG, IAG

# Media Engagement in relation to research

June 2007 Interview for BBC Radio 4's Farming Today
Sept 2007 Interview for BBC Radio 4's Costing the Earth

Nov 2007 Interview for BBC News 24

May 2008 Live interviews with BBC Radios 4 (Today programme) and 5, Channel 4 news, BBC Radio Wales, BBC Radio

Scotland; BFBS; BBC Radio Three Counties; BBC Radio Newcastle; Durham FM; Century FM; Rugby FM, ITV Tyne Tees, BBC North-East; Sky News; material in; Daily Telegraph; The Sun; Daily Express; THES; Metro; 19 regional

newspapers

October 2008 Material on alternative ways of reconstructing flood history was the subject of an article in the Financial Times

October 2008 Report released by the National Trust were widely reported in the press. The study said the prospect of more frequent

droughts and floods meant an urgent rethink was needed to update existing measures. One of the projects featured in the report involved looked at innovative ways to manage the landscape at Upper Wharfedale in the Yorkshire Dales

using Durham-generated evidence.

October 2008 Featured in the Observer and the Guardian, commenting on Environment Agency research into water resource futures.

November 2009 Live interviews with BBC News 24, subsequently broadcast on BBC Radio 4, in relation to Cumbria floods

## Teaching and related activities

#### PhD. and MSc (by research) students supervised

Completed and awarded:

- Ms. Michelle Crowell. British Council funded. Sole supervisor. Commenced research, Oct 1995. Sub dissertation, July 1998. Nitrogen cycling, seedling performance and new native pinewoods
- Ms. Shuang-ye Wu. ORS/CCT funded. Sole supervisor. Commenced research October 1996. Submitted, August 1999

  The development and enforcement of U.K. water policy
- Mr. Justin Butler. NERC funded. Lead supervisor. Commenced research October 1995. Submitted, September 1999

  Roughness parameterisation for hydraulic models
- Mr. Sam Lau. Croucher Foundation. Sole supervisor. Commenced research October 1997. Submitted, December 2000 Statistical and dynamical systems investigation of eutrophication processes in shallow lake ecosystems
- Mr. Hakan Tarras-Wahlberg. Sole supervisor. Swedish Government funded. Commenced research October 1998. Submitted dissertation February 2001.
  - Geochemistry, hydrology and geomorphology of mine-polluted sediment in the Puyango Basin, Ecuador.
- Ms. Elaine Tabone-Adami. Sole supervisor. CCT funded. Commenced research October 1998. Submitted dissertation March 2001.

  Coupling land-use nutrient runoff to coastal eutrophication using remote sensing
- Mr. Richard Westaway. NERC funded. Lead supervisor. Commenced research October 1998. Submitted dissertation September 2001.

  Automated monitoring of large-scale braided river systems
- Mr. Chris Keylock. NERC funded. Lead supervisor. Commenced research October 1997. Submitted dissertation September 2001 Numerical modelling of confluence dynamics
- Mr. Dan Parsons (University of Sheffield). Second supervisor. NERC funded. Commenced research October 1999. Submitted November 2002.
  - Development and application of Large Eddy Simulation to modelling of flow in meander bends.
- Mr. P. Carbonneau (universite de quebec). Second supervisor. Commenced research October 1998. Submitted November 2002

  Quantification of river bed grain size for Atlantic salmon habitat using photogrammetry and geostatistics
- Mr. Tim James. First supervisor. University of Leeds funding. Commenced research January 2000. Submitted December 2003.

  Automated detection and correction of error in DEMs of topographic surfaces obtained using automated stereomatching
- Mr. Mark Lawless. First supervisor. University of Leeds/ORS funding. Commenced research October 2000. Submitted September 2003. Laboratory measurement and numerical modelling of flow processes over gravel bedforms.
- Mr. Matt Roberts. Co-supervisor. EPSRC funded. Commenced research October 2000. Submitted November 2004 Flow and sediment dynamics of confluent channels at meander bends
- Mr. Simon Reid. First supervisor. University of Leeds. Commenced research October 2001. Submitted November 2004 Sediment delivery, river dynamics and environmental change in an upland gravel-bed system
- Mr. Vahid Tayefi. Iranian government. Commenced research March 2001. Submitted February 2005.

  Numerical simulation of interactions between upland river sedimentation and flood indundation
- Mr. Yu Dapeng. First supervisor. University of Leeds/ORS funding. Commenced research October 2001. Submitted April 2005. Two-dimensional fluvial flood modelling using a diffusion wave treatment
- Mr. Rob Schindler. First supervisor. NERC. Commenced research October 2001. 3D numerical modelling of flow through submerged vegetation
- Mr. Rob Thomas. First supervisor. NERC funding. Commenced research October 2002. Thesis submitted November 2006.

  The morphology, sedimentology and dynamics of a sand-bed braided river
- Mr. David Mould. First supervisor. EA/YWA funding. Commenced research October 2002. Thesis submitted September 2006.

  Numerical prediction of in-stream habitat for optimising compensation flow releases
- Ms. Lucy Dugdale. First supervisor. Eden Rivers Trust funding. Commenced research Oct 2003. Thesis submitted May 2007.

  Salmonid restoration: an integrated assessment of the factors affecting salmonid populations at the catchment scale through the use of Remote Sensing and GIS
- Ms. Emma Waterhouse. First supervisor. EPSRC funding. Commenced research October 2004. Thesis submitted May 2008 Interactions between sediment delivery, downstream fining, bed aggaradtion and flood risk
- Mr. David Milledge. First supervisor. NERC funding. Commenced research October 2004. Thesis submitted September 2008

  Monitoring and numerical modelling of debris flows
- Mr. Chris Buckley. First supervisor (MSc. by research). Defra. Commenced research August 2007. Thesis submitted December 2008

  Downscaling Defra AgCensus data for SCIMAP modelling
- Ms. Carly Maynard. First supervisor (MSc. by research). Environment Agency. Commenced research August 2008 Ecological impacts of redesigned reservoir releases, Derwentside, Co Durham
- Mr. Brian Cook. Joint supervisor. Durham Doctoral Fellowship. Commenced research October 2006. Thesis submitted 2010 Knowledge controversies and flood management in LDCs
- Mr. Ian Pattison. Joint supervisor. Eden Rivers Trust. Commenced research October 2006. Thesis submitted 2010 Mathematical modelling of rural land management impacts upon flow extremes
- Mr. David Higgins. First supervisor. Yorkshire Dales Rivers Trust. Commenced research March 2006. Thesis submitted 2010

Where have all the brown trout gone? Modelling catchment controls upon instream fisheries

Mr. Jonah Tosney. First supervisor. NERC Industrial CASE application. Commenced research September 2007. Thesis submitted 2011 Redesigning Compensation Flow Releases using mathematical modelling

Registered for PhD. research:

Ms. Carly Maynard. First supervisor (PhD). ESRC-NERC interdisciplinary award. Commenced research October 2009 Science, participation and modelling changing reservoir releases to deliver sustainable water supply

Mr. Matthew Tancock. First supervisor (PhD). NERC funding. Commenced research October 2009

Monitoring and modelling coarse sediment transport at river junctions

Mr. Tim Majoribanks. Second supervisor (PhD). NERC funding. Commenced research October 2009

Modelling vegetation and turbulence in open channel river flow

Mr. Natan Micheletti \*\* Mr. Nico Bätz \*\* Mr. Stephan Ütz

## **Examining of Research Students**

| 1996 | Internal Examiner, University of Cambridge, PhD. dissertation submitted by Mr. S. Sinha               |
|------|---|
| 1998 | External Examiner, University of Bristol, Ph.D. dissertation submitted by. Mr. C.N. Smith             |
| 1998 | Internal Examiner, University of Cambridge, PhD. dissertation submitted by Mr. J. Green               |
| 1998 | Internal Examiner, University of Cambridge, PhD. dissertation submitted by Ms. H. Bulkeley            |
| 1999 | Internal Examiner, University of Cambridge, PhD. dissertation submitted by Mr. Wei Hu                 |
| 2000 | External Examiner, University of Aberdeen, PhD. dissertation submitted by Mr. G.J. Cunningham         |
| 2000 | Internal Examiner, University of Leeds, PhD. dissertation submitted by Ms. N. Gamble                  |
| 2001 | Internal Examiner, University of Leeds, PhD. dissertation submitted by Ms. J. Horton (Earth Sciences) |
| 2002 | External Examiner, University of Reading, PhD. dissertation submitted by Mr. D. Cobby                 |
| 2003 | Internal Examiner, University of Leeds, PhD. dissertation submitted by Mr. S. Reaney                  |
| 2004 | External Examiner, University of Lancaster, PhD. Dissertation submitted by Mr. F. Pappenberger        |
| 2005 | External Examiner, University of British Columbia, Canada, PhD. Dissertation submitted by Mr. D. Hamm |
| 2005 | External Examiner, University of Southampton, DSc, Professor Basil Gomez                              |
| 2006 | External Examiner, University of Bristol, PhD, Dissertation submitted by Mr. N. Hunter                |
| 2006 | External Examiner, University of Sheffield, PhD, Dissertation submitted by Mr. J. Cooper              |
| 2007 | External Examiner, Cork Institute of Technology, MEng, Dissertation submitted by Mr. K. Motherway     |
| 2009 | Internal Examiner, Durham University, PhD, Dissertation submitted by Mr M. Smith                      |
| 2009 | External Examiner, King's College London, PhD, Dissertation submitted by Mr J. Porter                 |
| 2009 | Internal Examiner, Durham University, PhD, Dissertation submitted by Ms Katie Smith                   |
| 2010 | External Examiner, EPFL, PhD, Dissertation submitted by Marcelo Leite Ribeiro                         |
| 2011 | Internal Examiner, Université de Lausanne, PhD, Dissertation submitted by Pascal Pedruzza             |
| 2012 | External Examiner, ETHZ, PhD Dissertation submitted by Manuel Nitsche                                 |
| 2013 | External Examiner, ETHZ, PhD Dissertation submitted by Georgina Bennett                               |
| 2013 | External Examiner, University of Wageningen, PhD Dissertation submitted by M G Sassi                  |
| 2013 | External Examiner, EPFL, PhD Dissertation submitted by **   |
| 2013 | Externe, IRSTEA Grenoble, Habilitation, Dr. Alain **  |
| 2013 | External Examiner, University of Trento, PhD Dissertation submitted by **                             |
| 2013 | External Examiner, University of Trento, PhD Dissertation submitted by **                             |
| 2013 | External Examiner, University of Trento, PhD Dissertation submitted by **                             |
| 2013 | External Examiner, University of Trento, PhD Dissertation submitted by **                             |
| 2013 | External Examiner, ETHZ, PhD Dissertation submitted by **   |
| 2013 | Internal Examiner, Université de Lausanne, PhD Dissertation submitted by Gabriela Werren              |

## Programme and module design and management

| 1994-1999<br>2000-2003 | Assistant Director, then Director, MPhil in Environment and Development, Cambridge University  BSc Programme Manager, Leeds University |
|------------------------|--|
| 2000-2003              | Designed and convened Leeds Level 2 module, Physical Geography: Nature and Methods   |
| 2009                   | Designed new MSc and MA Programmes in Risk for Durham University (adopted as an example of best practice in                            |
|                        | Course Design by University)   |
| 2004-2011              | Designed and convened Durham Level 3 module, Environmental Processes and Change  |
| 2011-                  | Designed and convened Lausanne Masters module, River Management (theory, field class)  |
| 2011-                  | Designed and convened Lausanne Bachelors module, Fluvial Geomorphology   |
| 2011-                  | Designed and convened Lausanne Bachelors module, Geomorphological Research Project   |
| 2012-                  | Designed and convened Lausanne Masters module. Environmental Modelling   |

# 2012- Designed and convened Lausanne Masters module, Dynamics of Mountain Environnments (field class)

## Taught graduate student courses

| 2010-2011<br>2010-2011<br>2004-2006 | Durham. MSc Module, Fundamentals of Risk Research Durham. MSc Module, Understanding Risk Durham. Graduate Training Programme. Physical Geography Research Design.     |
|-------------------------------------|---|
| 2001-2004                           | Leeds. MSc Module, Introduction to River and Floodplain Hydraulic Modelling   |
| 1994-1999<br>1994-1999<br>1994-1999 | Cambridge. MPhil Module, Global Environmental Change<br>Cambridge. MPhil Module, Aquatic Pollution<br>Cambridge. MPhil Module, Delta and River Management, case-study |

## Taught undergraduate courses

| 2004-2011 | Durham. Level 3. Environmental Processes and Change: Alpine Field Class (50 students)    |
|-----------|--|
| 2008-2009 | Durham. Level 3. River dynamics (30 students)  |
| 2004-2005 | Durham Level 3. Gravel-bed rivers (25 students)  |
| 2008-2010 | Durham. Level 2. Scientific Research: research design (90 students)                      |
| 2004-2006 | Durham Level 2. Fluvial systems (40 students)  |
| 2005-2010 | Durham. Level 1. Physical Geography: river and floodplain systems (240 students)         |
|           |  |
| 2000-2003 | Leeds. Level 3. River Management (40 students)   |
| 2001-2004 | Leeds. Level 2. Alpine Field Course (40 students)  |
| 2000-2002 | Leeds. Level 2. River Systems (40 students)  |
| 2000-2004 | Leeds. Level 2. Physical Geography: nature and methods (80 students)                     |
| 2001-2004 | Leeds. Level 1. Physical Geography Methods (170 students)                                |
| 2001-2004 | Leeds. Level 1. Introduction to Physical Geography: rivers and catchments (500 students) |
|           |  |
| 1994-1999 | Cambridge. Level 2. Environmental Science: problems and policy (70 students)             |
| 1994-1999 | Cambridge. Level 1. Environment and Resources (100 students)                             |
| 1994-1997 | Cambridge. Level 1. Introduction to statistical methods (100 students)                   |
|           |  |

# Assessment of Taught Programmes

2011-12 Assessor of MSc. Programmes University of Oxford School of Geography and Environment

# **External Examining of Undergraduate Programmes**

| 2001-2004 | University of Cambridge   |
|-----------|---------------------------|
| 2003-2007 | University of Southampton |
| 2004-2007 | University of Nottingham  |
| 2007-2011 | University of Newcastle   |
| 2007-2011 | University of Bristol     |
| 2010-2014 | Trinity College, Dublin   |