

Rebecca Jane Miriam Goss FRSC FRSE

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The Goss Group are active in the area of elucidating and engineering biosynthesis of **natural products, at the chemical and genetic level, and in blending synthetic biology and synthetic chemistry to make new to nature natural products**. Specifically, our research focuses on natural products with important medicinal properties, particularly anti-infectives, and in understanding how biosynthetically intriguing motifs within these compounds are assembled. From this vantage point we harness individual enzymes as convenient tools for organic synthesis, and engineer a combination of synthetic chemistry and synthetic biology to harness entire biosynthetic pathways in order to enable expeditious access to libraries of medicinally relevant compounds. These libraries may be used to gain a greater understanding as to how the drug acts at the molecular level within the cell.



Here we are particularly noted for our pioneering work in **precision molecular editing** using halogenases in complement with aqueous cross-coupling methodologies that we develop.

The Goss group also have active programmes in the complementary areas of natural product and biocatalyst discovery and development. In team with scientists in Chemical Engineering the Goss group have pioneered an Engineered *E. coli* plug and play platform for biocatalysis.

Goss has established a **national and international reputation** presenting >160 invited, plenary and keynote lectures including: Brown Lecture Queens, Canada **2023**, Don Summers Lecture, Utah **2022**, Society Frank Warren Lecture Capetown **2022**, Canadian Chemical Society **2019**, Synthetic Biology of Natural Products **2019**, ASTAR Singapore **2018**, MSD Boston **2018**, GRC Natural Products **2018**, Yale, ETH **2013**

AWARDS AND HONOURS

2003 Royal Society Dorothy Hodgkin Fellowship (~10 awarded each year across the UK in science)

2007 RSC Meldola Medal (awarded to the most promising UK chemist under the age of 32) particularly “distinguished for excellent contributions at the interface of organic chemistry and molecular biology”

2011 Thieme Chemistry Journal Award

2011 JSP award to participate at the Burgenstock Stereochemistry meeting

2011 Selected as the UK’s under 40 Organic Chemistry delegate for EuChem’s Young Investigators Workshop

2013 Natural Product Report Emerging Researcher Lectureship

Awarded for our pioneering new approach to natural product analogue generation “Genochemetics”, which marries together Synthetic Biology and Synthetic Chemistry to access new bioactives of medicinal interest.

Awarded in subsequent years to scientists at Yale, Harvard and Scripps

2014 ERC consolidator award,

2021 Royal Society Industrial Fellowship

2020 Elected Fellow of the Royal Society of Edinburgh

2021 Award for Disruptive Innovation, AccelerateHer

2022 Converge Challenge Award: top prize for best Scottish University Spinout

2022 RSC Corday Morgan Medal (awarded to the most meritorious contributions to chemistry, in particular for **pioneering the use of enzymatic halogenation/cross-coupling in C-H activation**). This is one of the RSC’s most prestigious awards, established in 1949.

2022 Winner of Converge Challenge (Scotland’s top Spinout Competition)

Professor Rebecca J. M. Goss FRSC FRSE

2022 CEFIC: Solvay, selected to join 32 of the best European Chemists <https://cefic.org/media-corner/newsroom/renowned-chemistry-professors-and-young-european-scientists-recreate-the-iconic-photo-featuring-curie-and-einstein/>

Employment Record

Professorship in Biomolecular/Organic Chemistry, University of St Andrews

St Andrews first female full professor of Organic Chemistry

2018-onwards

Readership (Associate Professorship) in Biomolecular/Organic Chemistry, University of St Andrews

September 2012 – 2018

Readership in Organic Chemistry, University of East Anglia

January 2012 – September 2012

Senior Lectureship, School of Chemistry, University of East Anglia

December 2010 – January 2012

Lectureship, School of Chemistry, University of East Anglia

July 2005-2010 (**Maternity break 2008**)

Lectureship, School of Biological and Chemical Sciences, University of Exeter

October 2003-June 2005 (Closure of Chemistry in Exeter)

Royal Society BP Dorothy Hodgkin Fellowship

“Combinatorial and Directed Biosynthesis to Create Novel Halogenated “Natural” Products”

October 2003-2007

One Year Teaching Fellowship, School of Chemistry, University of Nottingham

October 2002-September 2003

Post Doctoral Research Associate, Department of Biochemistry, University of Cambridge, Professors J. Staunton (FRS) and P. F. Leadlay (FRS)

November 2000-September 2002

Education

PhD, University of Durham, Professor D. O'Hagan

October 1997-October 2000 (Awarded June 2001)

Various studies including investigations into the stereochemical course of the fluorination event in the biosynthesis of fluoroacetate. Involved a short period at Paris XI.

Degree Chemistry BSc Hons., Hatfield College, University of Durham

First year joint Biology and Chemistry (Awarded June 1997)

EXTERNAL PROFILE

Over 160 external research lectures including many named, plenary and keynote lectures.

1. Keynote Speaker, GRC Marine Natural Products 2024

2. Keynote: Brown Lecture Queens Canada (date tbc 2023)
3. Keynote Speaker Nordic Natural Products, Helsinki 2023
4. Invited speaker GRC Nucleic acids
5. Invited speaker European Symposium on Medicinal Chemistry, Croatia, 2023
6. Invited Speaker Oxford 2023
7. Invited Speaker GRC Nucleic Acids 2023
8. Invited Speaker Newcastle, February, 2023
9. Invited speaker Royal Society Fellows day
10. Invited Speaker Kings College London, April 2023
11. Invited Speaker, **Munich**: Bioorganic July 2022
12. Conference Organiser: Synthetic Biology of Natural Products III, Mexico 2022
13. Keynote/ Don Summers Memorial Lecture, **Utah**, 2021 (online)
14. Invited speaker University of California **Santa Barbara** (online)
15. Invited Speaker, ESOC, **Ghent** 2021 (rescheduled)
16. Keynote/ Frank Warren Lecture, **UCT, SA** 2021 (online)
17. Keynote/ RSC Chem Soc Rev Desktop Lecture with Charlie Moore (Novartis)
18. Invited Speaker RSC/AZ Organic Symposium – moved online
19. Keynote Speaker, IUPAC, 31st Symposium on Chemistry of Natural Products, **Naples** 2020 - postponed
20. Invited Speaker, Joint Genome Institute, **Oakland**, California, 2020 – rescheduled for 2021
21. Invited Speaker **San Diego**, SIMS, 2020
22. Plenary Speaker, European Colloquium on Heterocyclic Chemistry, **Rouen**, 2020 rescheduled for 2021
23. Invited Speaker, Late Stage Functionalisation, **Manchester**, 2020
24. Invited Speaker, Women in Chemistry, **Nottingham**, 2020
25. Invited speaker -SynBio **Nice** -declined
26. Invited Speaker SCOTchem Natural Products, **Aberdeen** 2019
27. Invited Speaker NPRONET, **London**, 2019
28. Speaker –Scottish Metabolomics Network, **Glasgow**, 2019
29. Invited Speaker Japan Chemical Society, **Sendai**, 2019
30. Invited Speaker, **Tokyo University**, 2019
31. Invited Speaker, **Kitasato Institute**, **Tokyo**, 2019
32. Invited Speaker, Canada Chemical Conference, **Quebec**, 2019
33. Invited Speaker Fusion, Synthetic Biology of Natural Products, **Mexico**, 2019
34. Invited Speaker CBC Novo Nordisk Natural Products, **Copenhagen**, 2019
35. Invited speaker **Sussex**, February 2018
36. Invited Speaker, GSK, September 2018
37. Invited Speaker, ASP, **USA**, July 2018
38. Invited Speaker **MSD, USA**, July 2018
39. Invited Speaker, GRC Natural Products, **New Hampshire, USA**, July 2018
40. Invited Speaker, Warwick, June 2018
41. Plenary Speaker, European Symposium on BioOrganic Chemistry, **Gregynog** May, 2018
42. Plenary Speaker, European Symposium on BioOrganic Chemistry, **Gregynog** May, 2018
43. Invited Speaker, **University of York** 2018
44. Invited Speaker, Biosystems Design 4.0, **Singapore**, May 2018
45. Invited Speaker, **Wuhan, China**, April, 2018
46. Invited Speaker, Natural Product Discovery and Development, **Florida, USA**, January 2017
47. Plenary Lecturer, Mona Congress, **Jamaica**, January 2018
48. Invited Speaker, University of **Basel**, December 2017
49. Invited Speaker, NPRONET, **Manchester**, October 2017
50. Invited Speaker, Dial a Molecule, **Liverpool**, May 2017

51. Invited Speaker, Halogenation, **Glasgow**, June 2017
52. Invited Speaker, ISBA, **Korea**, May 2017
53. Invited Speaker, **Tubingen** Natural Products Meeting May 2017
54. Seminar Speaker, **Servier**, France, May 2017
55. Seminar Speaker, **Edinburgh**, March, 2017
56. Invited Speaker, Synthetic Biology of Natural Products, **Mexico**, March 2017
57. Seminar Speaker, **Muenster**, March, 2017
58. Plenary lecture **Norwegian** Chemical Society annual meeting January 2017
59. Invited Speaker, Polyomics, **Glasgow**, February, 2017
60. Invited Speaker, **Scottish Metabolomics** Network, November 2016
61. Invited Speaker, **Turkey** BNP, September 2016
62. Invited Speaker, EUCHEM, **Seville**, September 2016
63. Keynote Speaker invitation **Canberra** declined due to teaching commitments
64. Invited Speaker, Cambridge postgraduate symposium March 2016- declined due to teaching commitments
65. IBIOIC speaker January 2016
66. Invited Speaker Oxford postgraduate symposium November 2015- declined due to teaching commitments
67. Keynote Speaker, 3rd India/UK Med Chem Congress, **Hyderabad**, November 2015–Declined invitation
68. Invited Speaker, **Leipzig**, December 2015
69. Invited Speaker, **Bonn** declined due to teaching commitments
70. Invited Speaker, **NPronet, Manchester**, September 2015 Declined
71. Invited Speaker, **Oxford** Chemistry, Pfizer Symposium, October 2015 Declined
72. Invited Speaker, NOST, **India**, October 2015 Declined
73. Invited Speaker, RSC Oxford/Cambridge Synthesis meeting **Cambridge** July 2015
74. Keynote Speaker, Biotrans, **Vienna**, July 2015
75. Keynote Speaker, Dial a Molecule, **Warwick**, June 2015
76. Invited Speaker, Max Plank, Chemical Ecology, **Jena**, January 2015
77. Invited Speaker, **Newcastle**, January 2015
78. Invited Speaker, Dublin Symposium, **Dublin** December 2014
79. Invited Speaker, Chemical Ecology, **Jena** December 2014
80. Invited speaker, Natural Products **Capetown**, September 2014
81. Invited Seminar Speaker, UCT **Capetown**, September 2014
82. Invited Speaker, ERAIB, **Dresden**, September 2014
83. Invited Speaker, Bluegenics, **Rekjavic**, September 2014
84. Invited speaker, GRC Biocatalysis, Bryant University, **Smithfield USA** July 2014
85. Invited speaker, International ELRIG, **Telford**, March 2014
86. Speaker, Perkin Meeting, Heriot Watt, **Edinburgh**, December 2013
87. Keynote speaker, and RSC NPR award lecture, CIFARP, Ribiero de Preto, **Brazil**, November 2013
88. Invited speaker, (declined) International Symposium on antibacterial research of the DFG, **Bonn**, November 2013
89. Invited speaker, Biofilm Workshop, **Dublin**, November 2013
90. Speaker, VAAM Workshop, Biology of Bacteria Producing Natural Products, **Frankfurt**, September 2013
91. Invited speaker, **Yale**, September 2013
92. Plenary speaker invitation (declined) Hetrocyclic and Astex, **Cambridge**, September 2013
93. Invited speaker, Transatlantic Frontiers of Organic Chemistry, Kloster, Seon, **Germany**, August 2013
94. Invited speaker, Joint JCS and RSC Symposium on Chemical Biology, **Kyoto**, Japan, March, 2013

95. Invited speaker, SGM Annual meeting, **Manchester**, March 2013 – (requested representation by senior PDRA)
96. Invited speaker, **GSK Stevenage**, November, 2012
97. Invited speaker, New Frontiers in Natural Product Chemistry, **Nottingham**, September, 2012
98. Invited speaker, CHINA, September, 2012 (withdrawn, due to moving to St Andrews)
99. Invited speaker, Bacterial natural products workshop Novartis, **Basel**, September 2012 – (requested representation by senior PDRA)
100. Keynote speaker, the 2012 International Congress on Natural Products Research, **New York**, August, 2012
101. Invited speaker, Gordon Research Conference on Natural Products, **New Hampshire**, July, 2012
102. Invited speaker, **ETH Zurich**, July, 2012
103. Invited speaker, **Institute of Chemical Research of Catalonia, ICIQ**, June, 2012
104. Keynote speaker, Synthetic Biology to Dial-a-Molecule, **GSK, Stevenage**, May, 2012
105. Keynote speaker, European Symposium on BioOrganic Chemistry, **Gregynog** May, 2012
106. Invited speaker, **Dresden**, May 2012
107. Invited speaker, David O'Hagan's Fluorine award symposium, ACS, **San Diego**, March, 2012
108. Invited speaker, **Minnesota Centre for Drug Design**, March 2012
109. Invited speaker, **Nebraska Medical Centre**, March 2012
110. Invited speaker, **Michigan**, March 2012
111. Invited speaker, **Leeds**, February 2012
112. Speaker, Zing Natural Products, Lanzarote, February 2012
113. Invited speaker, **Gröningen**, January 2012
114. Invited speaker, **St Andrews**, Scotland, November, 2011
115. Invited lecture, Institute for Technical Biochemistry, **Stuttgart**, October, 2011
116. Invited speaker, **Munster**, October 2011
117. Speaker, Gregynog Young Organic Chemists meeting, **Gregynog**, October 2011
118. Speaker, ESF/EMBO Synthetic Biology, **St Felieu**, Spain, October 2011
119. Invited speaker, **Syngenta**, Jealotts Hill, UK, September 2011
120. Invited speaker, Texas South Western, **Dallas**, September 2011
121. Invited speaker, ACS Fall Meeting, BIOL: **Pfizer symposium, Denver**, August 2011
122. Invited speaker, Synthetic Biology Symposium, Imperial, **London** July 2011
123. Selected as UK <40year old Organic Chemistry representative, EUCHEMS, **Crete**, July 2011
124. Invited speaker, Department of Chemistry, University of **Geneva**, July 2011
125. Short Talk, NADD 2011, **Naples**, June 2011
126. Invited Lecture, **Novartis, Basel**, May 2011
127. Short talk **Bürgenstock**, May 2011
128. Invited speaker, Department of Chemistry, University of **Cardiff**, April 2011
129. Invited speaker, Annual Meeting of the Chemical Society of **Japan**, Chemical Biology Symposium, March 2011, *cancelled*
130. Invited speaker, RSC Heterocyclic Symposium, Imperial, **London**, January 2011
131. Invited speaker, Department of Chemistry, **EPFL**, December 2010
132. ESF, Industrial Microbiology, Bielefield, **Germany**, November 2010
133. Invited speaker, Department of Chemistry, University College **London**, October 2010
134. Selected speaker, Natural Products, **Italy**, September 2010
135. Nominated for ACS Fall Meeting-Pre tenure Organic symposium, **Boston**, August 2010 ([16/64 nominees invited](#))
136. Invited speaker, Department of Chemistry, University of **Warwick**, June 2010
137. Invited speaker, Department of Chemistry, University of **Bristol**, June 2010
138. Invited speaker, Department of Biological and Chemical Sciences Seminar, **QMUL**, March 2010

139. Invited speaker, International Natural products Meeting, **Brazil**, November 2009
140. Invited speaker, Young Organic Chemists Symposium, Imperial, **London**, April 2009
141. Invited speaker, Zing Natural Products, **Antigua**, March 2009
142. Invited speaker, York Mini Symposium on Natural Products, **York**, December 2008
143. Invited speaker/consultant, GSK Young Academics Symposium, **GSK, Stevenage**, October 2008
144. Invited speaker, Department of Chemistry, **Oxford**, June 2008
145. Selected speaker, Natural Products **Italy**, May 2008
146. **Bürgenstock**, International Stereochemical Meeting, April 2008 (poster)
147. Invited speaker, Zing Natural Products **Antigua**, February 2008
148. Keynote speaker, RSC Natural Product Symposium, University of Nottingham, **Nottingham**, October 2007
149. Invited speaker, Department of Chemistry, **Edinburgh**, May 2007
150. Young Organic Chemists Workshop, **Gregynog**, October 2007
151. RSC, Biosynthesis, **Firbush**, September, 2007
152. RSC "Directing Biosynthesis" International Meeting, Robinson College, **Cambridge**, September 2006
153. Plenary Lecture, Society of General Microbiology, National Meeting **Dublin**, August 2006
154. IUPAC "Biodiversity and Natural Products" International Meeting, **Kyoto**, August 2006
155. Invited speaker, Department of Chemistry University of **Cape town**, February 2006
156. Invited speaker, Department of Chemical Engineering, **Bath**, November 2005
157. Invited speaker, Microbes in **Norwich** National Meeting, 2005
158. Invited speaker, Department of Chemistry **Liverpool**, 2005
159. RSC, Nucleic Acids **Firbush**, 2005
160. Invited speaker, SouthWest Regional Organic Meeting **Bristol**, 2005
161. IUPAC "Biodiversity and Natural Products" International Meeting, **New Delhi**, February 2004
162. Invited speaker, Department of Chemistry University of **Leeds**, 2004
163. Invited speaker, Department of Molecular Biology, University of **Göteborg, Sweden**, 2004

External Examiner

Masters theses (University of Bristol 3, University of Durham 1, Southampton University 1, University of Cambridge 1, University of Sussex 1, UCD 1, Birmingham 1, Aberdeen 1)

PhD thesis (University of Warwick, University of Manchester, Cardiff University, University of Bristol x 3, University of Queensland, University of Cambridge x 4, University of Oxford, University College Dublin, UCL x 2, University of Birmingham), Rhodes University

Royal Society Involvement

My sponsorship by the Royal Society provided me with the opportunity to become involved with a variety of schemes and initiatives. The Royal Society have set up a funding programme to facilitate collaboration between UK and Tanzanian scientists. With a small team of other UK scientists I joined the Vice President of the Royal Society and the RS international grant officers in a fact finding visit to Tanzania in order to help the Royal Society to set up a custom made funding programme. This visit was also very useful on a personal level as it provided me with links to Tanzanian Natural Product Chemists who isolate active components from traditional medicines. I have subsequently organised an run a workshop for UK and Tanzanian scientists with a research focus on bioactives from nature to present and discuss their research.

Royal Society of Chemistry Involvement

CBF now CBiF: I have served on the executive committee of the **RSC Chemical Biology Forum (CBF)** now renamed as the Chemistry Biology interface Forum CBiF. CBiF seeks to advise government on policy,

influence funding bodies, and has recently commissioned a report to assess the state of science at the interface between Chemistry and Biology in the UK.

Having had a break from being an invited member of CBiF, I have returned as an elected member

Organic Division (Formerly Perkin) I completed a term of service for the RSC Organic Division Executive. I have assisted in initiating a new annual South and East (London, Cambridge, East Anglia- and Pharma and Biotech in this region) Organic Symposium.

BOG: I served for 6 years as secretary to the RSC Bioorganic Chemistry group. The Bioorganic group have a large and developing portfolio of postgraduate, national and international conferences that seek to meet the needs of the interests group's members. Additional activities with BOG have included my involvement on the organising committee for an international meeting on "Directing Biosynthesis" (Cambridge 2006), the RSC annual Bioorganic Postgraduate meeting (Bath 2008), Chemistry of the Cell 3 (UCL 2008), and organising part of the IUPAC meeting (Glasgow 2009). I have also organised UK lecture tours for Professor John Vederas, University of Alberta (2008), Professor Sarah O'Connor, MIT (2007), and Professor Tobias Ritter, Harvard (2010)

Consultancy

I have acted as consultant for:

Servier (Paris)

GSK (Stevenage)

Merck (New Hampshire)

Novartis (Basel)

Institution Review

Invited to review institutes and be on strategic advisory boards for institutes nationally and internationally, due to time limitations I have accepted this only for the community serving Joint Genome Institute, DOE funded and based at the Lawrence Berkeley labs.

Editorial Boards and Peer Review of Various Papers and Grant Applications Including:-

Associate Editor Chem Soc Rev, one of 6 Associate Editors, Impact Factor 54.6

Member of the Advisory Editorial Board for RSC Chemical Communications

Member of the Advisory Editorial Board for RSC Natural Product Reports

Member of the Royal Society, Newton Grant Committee

Volkswagen Foundation, EPSRC funding committees

Elected Member of the RSC Chemistry Biology Interface Division

Journal articles: Nature Reviews, Biochemistry, Metabolic Engineering, Organic and Biomolecular Chemistry, Chemical Communications, ChemBioChem and Chemical Science.

Grant applications: Royal Society, BBSRC, EPSRC, Leverhulme, National Research Foundation South Africa, International Foundation for Science-Portugal (IFS), Chem-Them Netherlands (NWO) and The Marsden Fund,

Society Membership

Royal Society of Chemistry

Royal Society of Edinburgh

Previously, and now a lapsed member of:

American Chemical Society

Biochemical Society

Society for General Microbiology

Higher Education Academy

Funding Awarded >£9M as PI

In prep

Leverhulme: the role of halogenases in cyanobacterial infections	£250K	PI
EPSRC Open Plus Fellowship	£2.4M	PI

Submitted

NERC: microbial communities evolution	£4M	COI
IBIOIC : cofactor recycling	£100K	PI
EastBio Studentship	£90K	PI

Awarded

2022-2022	BA Refugee funding, host for Head of Department of international University of Kyiv		
2022-2024	IAA	£49K	PI
2022-2024	ERC Proof of Concept (converted with UKRI)	£150K	PI
2022-2023	Scottish Enterprise Phase 2	£265	PI
2021-2024	IBIOIC Entrepreneurial studentship	£90K*	PI
2021-2023	Royal Society Industry Fellowship to Goss	£148K	PI
2021-2022	IAA FOR X-GENIX	£22.5K	PI
2020-2021	SARIRF priming funding to establish E@ST	£72802	PI
2020-2022	BBSRC Follow on Fund	£252K	PI
2020-2021	SARF Funding X-Genix	£32853	PI
2020-2021	RSE Enterprise Fellowship for Sunil Sharma	£90K	Host
2020-2021	BBSRC studentship with Unilever	£90K	PI
2020-2021	Scottish Enterprise – High Growth Spin out Program	£120K	PI
2020-2021	ISSF Funding: Halogenase Development	£15K	PI
2020-2021	IBIOIC Funding: Halogenase Development	£15K	PI
2020-2022	MRC SA Funding	£1.445M	CoI
2020-2022	EPSRC: GCRF: Antibiotics and Africa,	£531,970	CoI
2018	Royal Society Wolfson SMART centre (St Andrews Multidisciplinary Anti-infective Research and Therapeutics Centre)	£165700	PI
2018	SULSA Funding to establish and support SHINE	£20K	PI
2018-2022	IBIOIC studentship	£90K	PI
2018-2022	EastBio studentship	£90K	PI
2018	ISSF	£16K	PI
2018	IAA with Gayle Doherty, and Cristina Pubill	£18K	PI
2017-2019	IBIOIC Synthetic Biology Award with Ingenza and Lucite	£200K	PI
2017-2018	Syngenta	£10K	PI
2015-2017	Marie Curie IIF for Cristina Pubil	€183,455	PI
2015-2016	IBioIC with Ingenza	£96K	PI
2015-2019	H2020 EMBRIC (Marine Research)	€376,262 / €9,041,611	CoI
	Linking across Europe to develop best practice in the discovery of bioactives from the marine environment		
2014-2019	ERC consolidator	€2M	PI
2014-2017	FP7 ERA IB: Biochemistry and applications of halogenases to antibiotic and agrochemical development	£442.5K	CoI
2013-2017	GSK Case Award	~£90K	PI
2012-2016	EU Integrating Marine Biotechnology Bluegenics Leading WP6 on development of marine bioactives	~ €375K / Euro6M	CoI

	And analogue generation		
2013-2014	Impact Acceleration Award	£21K	PI
2012-2015	Syngenta Case Award	~£90K	PI
2012	Biochemical Society studentship	~1.6K	PI
2011-2014	BBSRC (ranked 4th st /~120 at panel)	£350K	PI
2011-2013	Marie Curie IIF	Euro 210K	PI
2011-2014	BBSRC (ranked 1 st /~100 at panel)	£387K	PI
2010-2014	MRC CASE award/Aquapharm	£90.06K	PI
2010	Nuffield Summer Studentship	£1.4K	PI
2010-2011	BigC	£50.893	CoI
2009-2011	Leverhulme F/00204/AO	£111.5K	PI
2009-2012	MRC Millstein in collaboration with Dr Matt Hutchins (UEA)	£394.32K	CoI
2009-2015	INTERREG UEA, Southampton, Caen, Rouen	£1183.174K	CoI
2008	Royal Society Tanzania Network Grant	£10K	PI
2008	Nuffield Summer Studentship	£1.4K	PI
2007-2010	BBSRC BB/E008984/1	£259.424K	PI
2007-2010	EPSRC EP/E000894/1	£55.948K	PI
2007-2009	Leverhulme F/00204/AF	£93.898K	PI
2003-2007	Royal Society Dorothy Hodgkin Fellowship	£145.240K	PI
2003-2007	EPSRC/Biotica CASE	£70K	PI
2006 SGM	Summer Studentship	£1.68K	PI
2005	Nuffield Summer Studentship	£1.3K	PI
2004	Pfizer Summer Studentship	£1.8K	PI
2004	SGM Summer Studentship	£1.68K	PI

Current Research Group

Postdoctoral Research Associates

Dr Sunil Sharma
 Dr Rose Lynch
 Dr Yunpeng Zhang
 Dr Helen Connaris
 Dr Prabs Dehal
 Dr Ming Tong

Dr Olena Holodaeva (visiting researcher: Head of School of Chemistry and Pharmacognosy, IU Kyiv)

PhD. Students

Miss Montella Simeon Gordon	Undergraduate Glasgow
Miss Viktorija Stikonaite	Undergraduate St Andrews
Miss Ying Zhang	Undergraduate Beijing
Mr David Burnet	Undergraduate St Andrews
Miss Scarlett Ferino	Undergraduate St Andrews
Mr Sam Molyneux	Undergraduate Cambridge
Miss Hannah Lawther	Undergraduate Aberdeen

Graduated PhD Students

Dr Simon Lanceron	2010	Undergraduate: Marseille, France, Employed at Eli Lilly
Dr Emma Rackham	2011	Undergraduate: Aston, Birmingham, Employed within by Chirotech, Cambridge
Dr Phillip Newill	2011	Undergraduate: Bangor, UK
Dr Funsho Obasanjo	2012	Undergraduate: UCL, UK, Employed in Nigerian government research institute
Dr Mike Winn	2012	Undergraduate: UEA, Employed as PDRA in Dublin
Dr Amany Ragab	2012	Undergraduate: Tanta Egypt, subsequently employed as research group leader and lecturer in Tanta
Dr Dan Tromans	2013	Undergraduate: Swansea, UK employed as a tutor then as a lecturer and programme leader for Science and Engineering at Kaplan International College
Dr Antoine Abou Fayad	2014	Undergraduate: Beirut, Lebanon, Employed as PDRA for Prof Rolf Muller, Saarland, now PI at American University of Beirut
Dr Joseph Zarins Tutt	2015	Undergraduate: UEA, Employed by Lonza
Dr Emma Bogosyan	2015	Undergraduate UEA, UK, Employed by European Lead factory
Mr Kevin Mahoney	2015	Undergraduate: Belfast, Employed in process chemistry
Dr Duncan Smith	2016	Undergraduate: UEA, Employed at the University of Manchester
Dr Enrico Marelli	2017	Employed as PDRA in Italy
Dr Danaï Gkotsi	2017	Undergraduate: Aberdeen Employed as PDRA Goss group
Dr Frida Michailidou	2017	Undergraduate: Thessaloniki, Greece, then Lyon Employed in ETHZ now as group leader
Dr Chris Cartmel	2019	Undergraduate Bangor, PDRA Prince Edward Island, Canada, interviewing for group leader positions
Mr Hannes Ludewig	2020	Employed as PDRA at Brandweiss
Mr Chris Bailey	2020	Undergraduate Manchester, Employed as PDRA at the University of Dundee
Miss Emily Abraham	2020	Undergraduate Bristol, Employed as a PDRA at St Barts, London
Mr Alan Obled	2021	Undergraduate Lyon, PDRA St Andrews
Miss Gemma Fisher	2022	University of St Andrews, Clinical trials analyst

Previous Postdoctoral Workers

Dr Ed Bower	PDRA Stirling
Dr Jinlian Zhao	Employed as PDRA in Warwick
Dr Jo Saddler	BBSRC Discovery fellow, Edinburgh
Dr Jack Connolly	PDRA Manchester
Dr Cristina Pübil	Assistant Prof, Sussex
Dr Sabine Gröschow,	Employed as PDRA St Andrews
Dr Tania Barberi	PDRA Italy
Dr Amany Ragab	Assistant Prof. Egypt
Dr Hong Gao	Employed as a PDRA in Edinburgh
Dr Moualan Gan	Employed as Assistant Prof. in Beijing
Dr Matthias Agbo	Employed as Associate Prof. in Kenya
Dr Michael Corr	Employed as PDRA in Cancer Research Group, Newcastle
Dr Andreas Tsoligkas (Joint project with Dr Mark Simmons, Birmingham Chemical Engineering)	Employed at Johnson Matthey Catalysts
Dr Refaat Hamed	Employed as a lecturer at Bradford University
Dr Abhijeet DebRoy	Employed as a senior scientist at Evotec, Thane (near Mumbai)
Dr Joanne Foulkes	Employed as a lecturer at Liverpool John Moore's

Innovation and Additional Service

I am strongly involved in service to the Scientific Community have significant additional administrative experience from my involvement in various RSC committees including the **RSC Chemical Biology Interface Forum** (to which I was elected), as **Secretary to the BioOrganic Group** (to which I was invited) and as an **Executive Member of RSC Organic Division** (to which I was invited).

Leading the spin out of X-Genix, having drawn together a strong international team (CEO and Founder)

Leading the formalisation of a cross-University Institute of Engineering at St Andrews

Publications

* Denotes corresponding author

A number of projects within my research group, as well as through collaboration, are now reaching maturity and numerous manuscripts are currently in preparation, several for leading multidisciplinary science journals. I list here only the submitted and published manuscripts:-

1. A fully aqueous and air compatible cross-coupling of sp³ primary alkyl halides: not only possible but facile
S. Molyneux, and RJM Goss*
ACS Catalysis 2023
2. Viruses in our seas
Y. Wang, H. Connaris, S. Ferrino and RJM Goss*
Biomolecules 2023
3. Artificial Intelligence Approaches to Natural Product Drug Discovery
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