

NAME Dr Kashyap Amratlal Patel		POSITION TITLE Wellcome Trust Career Development Fellow and Honorary Consultant in Diabetes & Endocrinology	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Bhavnagar University, Gujarat, India	MBBS	2002	Medicine and Surgery
University of Warwick, UK	PG Award	2007	Epidemiology and Statistics
Royal College of Physicians, London, UK	MRCP	2007	General Medicine
College of Life Sciences, University of Dundee, UK	Ph.D.	2013	Biology
Royal College of Physicians, London, UK	MRCP, Endocrinology	2018	Diabetes & Endocrinology

Positions

Sep 20 - Present:	Wellcome Trust Career Development Fellow, University of Exeter
Sep 20 - Present:	Consultant in Diabetes and Endocrinology, Royal Devon and Exeter Hospital
Aug 19 - Aug 20:	Academic Clinical Lecturer in Diabetes and Endocrinology, University of Exeter
Mar 16 - July 19:	Wellcome Trust Postdoctoral Fellow in Diabetes, University of Exeter
Mar 14 - Feb 16:	NIHR Clinical Lecturer in Diabetes, University of Exeter
Sep 13 - Feb 14:	Specialist Trainee in Diabetes and Endocrinology, Macclesfield Hospital
Sep 10 - Aug 13:	Wellcome Trust Clinical PhD Fellow, MRC PPU, University of Dundee
Aug 08 - Aug 10:	Specialist Trainee in Diabetes and Endocrinology, NHS hospitals, Merseyside, UK
Feb 05 - Jul 08:	Junior Doctor in General Medicine, multiple NHS hospitals in Merseyside, UK

Scientific Appointments

Current:	Research advisory board member, Diabetes Research and Wellness Foundation, UK
Current:	Board Member of Diabetes Research Steering Groups, Diabetes UK
Current:	Grant panel member for Society of Endocrinology, UK
Current:	Gene Curation expert panel member for monogenic diabetes, ClinGen, USA
Current:	Gene Curation expert panel member for Lipodystrophy, ClinGen, USA
Current:	American Diabetes Association, Precision treatment in Monogenic Diabetes group of the Precision Medicine in Diabetes Initiative, USA
Current:	Genomics England Clinical Interpretation Partnership – Diabetes and metabolism member

Honors and Awards

- Elected Fellow of Royal College of Physician (FRCP), London, Dec 2023
- Elected Fellow of Pakistan Society of Internal Medicine (FPSIM), Sep 2022
- Career Development Award, Wellcome Trust UK, Sep 2020
- Best oral presentation, The European Association for the Study of Diabetes -Study Group on Genetics of Diabetes, May 2019
- Runnerup Best UK Endocrine and Diabetes Trainee Award, March 2018, Diabetes UK
- Postdoctoral Fellowship, Wellcome Trust UK, Mar 2016,
- NIHR Clinical Lectureship, National Institute of Health Research, UK, Mar 2014,
- Nick Hales Young investigator award for top scientific research, Diabetes UK, March 2016,
- Young Investigator award for top scientific research, The European Association for the Study of Diabetes -Study Group on Genetics of Diabetes, May 2015

Funding history

- 2023-2026:** Using whole genome sequencing to identify non-coding elements associated with diabetes and related traits across ancestries, MRC, £1.5M, Co-I
- 2023-2025:** Identifying novel blood proteomic signatures for monogenic metabolic disorders, NIHR BRC Exeter, £35,287, PI
- 2023-2025:** Association of blood level of trypsinogen with meals and faecal elastase, NIHR BRC Exeter, £10,980, PI
- 2023-2023:** Summer Studentship, Society for Endocrinology, £2480, PI
- 2023-2025:** Redefining the genetic landscape of MODY, Project grant, EFSD, €100,000, PI
- 2022-2023:** Role of Mitochondrial DNA Variants in human health, Wellcome Trust Strategic Award, £29,755, Co-I
- 2022-2025:** Using genetics to better diagnose and treat adult-onset T1D in multi-ethnic US population, Project grant, JDRF, \$1.3M, Joint PI
- 2022-2025:** Identifying new subtypes of syndromic diabetes to provide novel insights into diabetes, Project grant, Diabetes UK, £147,000, PI
- 2020-2025:** The interaction of polygenic and monogenic diabetes to unravel new biology and diabetes subtypes, Wellcome Trust Career Developmental Fellowship, £998,000, PI
- 2021-2024:** New insights into MODY: using UK Biobank to discover the true causes, penetrance, phenotype and prevalence, Project grant, Diabetes UK, £173,855, Co-I
- 2017-2020:** Developing a Type 1 diabetes genetic risk score to get the right diagnosis and the right treatment for patients with diabetes, Project grant, Diabetes UK, £241,113, Co-I
- 2018-2019:** Defining heterogeneity of clinically diagnosed adult-onset type 1 diabetes using genetics and islet autoantibodies, Diabetes research and wellness foundation, £20,000, PI
- 2016-2019:** Identification of novel subtype of monogenic diabetes by excluding Type 1 diabetes using a polygenic risk score, Wellcome Trust Postdoctoral Fellowship, £425,000, PI
- 2015-2016:** TSHR receptor mutation, Royal Devon and Exeter hospital, £10,000, PI
- 2015-2016:** Antibody negative graves' disease, Project grant, Society for Endocrinology, £10,000, Jan 2015, PI
- 2014-2016:** Monogenic diabetes, NIHR Clinical Lecturer Fellowship, £90,000, PI
- 2010-2013:** Role of SIK in gluconeogenesis, Wellcome Trust PhD Fellowship for Basic science, £220,000, PI

Selected Invited Talks

- Endocrine Society Annual meeting 'Meet the professor', USA, 2024
- Diabetes UK Annual meeting, London, UK, 2024
- Pakistan Society of Internal Medicine annual meeting, Lahore, Pakistan, 2023
- Diabetes Update - National course for Endocrinology trainees, Loughborough University, UK, 2023
- The Scottish Study Group for the Care of Diabetes, Glasgow, UK, 2022
- The European Association for the Study of Diabetes annual meeting, Stockholm, Sweden, 2022
- Diabetes Care Conference, Ahmedabad, India, 2022
- Diabetes Professional Care, London, UK, 2021
- Department of Genetics Seminar. Kings College London, UK, 2021
- The European Society of Human Genetics annual meeting, 2021
- KEM University Hospital and Research annual seminar, Pune, India, 2021
- Curating the clinical genome, Sanger institute, UK, 2021
- IMDO-Diabetes conference, Bahrain, 2021
- Diabetes Care Conference, Ahmedabad, India, 2020
- American Diabetes Association Annual Meeting, San Francisco, USA, 2019
- Cardiovascular and Diabetes Seminar, University of Aberdeen, UK, 2019
- Diabetes and Metabolism Conference, Bahrain, 2018
- Rachmiel Levine-Arthur Riggs Diabetes Research Symposium, City of Hope, USA, 2018
- Institute of Metabolism and Systems Research Seminar, University of Birmingham, UK, 2015

D. Publications

- Total – 77
- Google Scholar: <https://scholar.google.com/citations?user=ATm6UNsAAAAJ&hl=en&oi=ao>

Top 10 selected publications from 74 publications in the last 10 years

1. Cannon SJ, Hall T, Hawkes G, Colclough K, Boggan RM, Wright CF, Pickett SJ, Hattersley AT, Weedon MN, **Patel KA**. Penetrance and expressivity of mitochondrial variants in a large clinically unselected population. *Hum Mol Genet.* 2023. Epub 20231121. doi: 10.1093/hmg/ddad194. PubMed PMID: 37988592.
2. Mirshahi UL, Colclough K, Wright CF, Wood AR, Beaumont RN, Tyrrell J, Laver TW, Stahl R, Golden A, Goehringer JM, Geisinger-Regeneron Discov EHRC, Frayling TF, Hattersley AT, Carey DJ, Weedon MN, **Patel KA**. Reduced penetrance of MODY-associated HNF1A/HNF4A variants but not GCK variants in clinically unselected cohorts. *Am J Hum Genet.* 2022;109(11):2018-28. Epub 20221017. doi: 10.1016/j.ajhg.2022.09.014. PubMed PMID: 36257325; PMCID: PMC9674944.
3. Colclough K, Ellard S, Hattersley A, **Patel K**. Syndromic Monogenic Diabetes Genes Should Be Tested in Patients With a Clinical Suspicion of Maturity-Onset Diabetes of the Young. *Diabetes.* 2022;71(3):530-7. Epub 20211117. doi: 10.2337/db21-0517. PubMed PMID: 34789499; PMCID: PMC7612420.
4. Laver TW, Wakeling MN, Knox O, Colclough K, Wright CF, Ellard S, Hattersley AT, Weedon MN, **Patel KA**. Evaluation of Evidence for Pathogenicity Demonstrates That BLK, KLF11, and PAX4 Should Not Be Included in Diagnostic Testing for MODY. *Diabetes.* 2022;71(5):1128-36. Epub 20220202. doi: 10.2337/db21-0844. PubMed PMID: 35108381; PMCID: PMC9044126.
5. **Patel KA**, Burman S, Laver TW, Hattersley AT, Frayling TM, Weedon MN. PLIN1 Haploinsufficiency Causes a Favorable Metabolic Profile. *J Clin Endocrinol Metab.* 2022;107(6):e2318-e23. doi: 10.1210/clinem/dgac104. PubMed PMID: 35235652; PMCID: PMC9113801.
6. **Patel KA**, Ozbek MN, Yildiz M, Guran T, Kocuyigit C, Acar S, Siklar Z, Atar M, Colclough K, Houghton J, Johnson MB, Ellard S, Flanagan SE, Cizmecioglu F, Berberoglu M, Demir K, Catli G, Bas S, Akcay T, Demirbilek H, Weedon MN, Hattersley AT. Systematic genetic testing for recessively inherited monogenic diabetes: a cross-sectional study in paediatric diabetes clinics. *Diabetologia.* 2022;65(2):336-42. Epub 20211023. doi: 10.1007/s00125-021-05597-y. PubMed PMID: 34686905; PMCID: PMC8741690.
7. Montaser H* & **Patel KA***, Balboa D, Ibrahim H, Lithovius V, Naatanen A, Chandra V, Demir K, Acar S, Ben-Omran T, Colclough K, Locke JM, Wakeling M, Lindahl M, Hattersley AT, Saarimaki-Vire J, Otonkoski T. Loss of MANF Causes Childhood-Onset Syndromic Diabetes Due to Increased Endoplasmic Reticulum Stress. *Diabetes.* 2021;70(4):1006-18. Epub 20210126. doi: 10.2337/db20-1174. PubMed PMID: 33500254; PMCID: PMC7610619.
8. **Patel KA**, Weedon MN, Shields BM, Pearson ER, Hattersley AT, McDonald TJ, team Us. Zinc Transporter 8 Autoantibodies (ZnT8A) and a Type 1 Diabetes Genetic Risk Score Can Exclude Individuals With Type 1 Diabetes From Inappropriate Genetic Testing for Monogenic Diabetes. *Diabetes Care.* 2019;42(2):e16-e7. Epub 20181108. doi: 10.2337/dc18-0373. PubMed PMID: 30409810; PMCID: PMC6984957.
9. Shepherd MH, Shields BM, Hudson M, Pearson ER, Hyde C, Ellard S, Hattersley AT, **Patel KA**, study U. A UK nationwide prospective study of treatment change in MODY: genetic subtype and clinical characteristics predict optimal glycaemic control after discontinuing insulin and metformin. *Diabetologia.* 2018;61(12):2520-7. Epub 20180918. doi: 10.1007/s00125-018-4728-6. PubMed PMID: 30229274; PMCID: PMC6223847.
10. **Patel KA**, Oram RA, Flanagan SE, De Franco E, Colclough K, Shepherd M, Ellard S, Weedon MN, Hattersley AT. Type 1 Diabetes Genetic Risk Score: A Novel Tool to Discriminate Monogenic and Type 1 Diabetes. *Diabetes.* 2016;65(7):2094-9. Epub 20160405. doi: 10.2337/db15-1690. PubMed PMID: 27207547; PMCID: PMC4920219.