CURRICULUM VITAE

**Full Name** Giriraj Ratan Chandak

**Date of birth** 7th June 1963, ~58 completed years

**Present position** Chief Scientist and Group Leader, CSIR-Centre for Cellular and Molecular Biology.

Professor, Academy of Scientific and Innovative Research (AcSIR)

**Address for correspondence**

CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB)  
Uppal Road, Hyderabad 500 007  
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**Academic and professional career**

* **PhD** (Biochemistry) Osmania University, Hyderabad. 2009
* **DNB** (Biochemistry) National Board of Examinations, New Delhi. 1994
* **MD** (Biochemistry) Banaras Hindu University, Varanasi. 1993
* **MNAMS**  National Board of Examinations, New Delhi. 1987
* **MBBS** University of Calcutta, Calcutta. 1986

**Positions and professional experience**

2016 onwards Scientist G Centre for Cellular and Molecular Biology (CSIR-CCMB),

(Deputy Director) Hyderabad, India

2015-2016 Director (On lien) Centre for DNA Fingerprinting & Diagnostics, Hyderabad, India

2011-2016 Scientist F CSIR-CCMB, Hyderabad, India

2006-2011 Scientist EII CSIR-CCMB, Hyderabad, India

2003-2006 Scientist EI (Merit) CSIR-CCMB, Hyderabad, India

1999-2003 Scientist C CSIR-CCMB, Hyderabad, India

1996-1999 Scientist III Centre for DNA Fingerprinting & Diagnostics, Hyderabad, India

1994-1996 Post-doctoral fellow CSIR-CCMB, Hyderabad, India

**Professional experience**

**(i) Experience in successfully running large programme, centre and institution**

***Mission Mode Programmes of CSIR***

* Director for CSIR-Sickle Cell Anaemia Mission comprising seven CSIR institutes (Phase I;2017-2020)
* Mission Director for CSIR-Sickle Cell Anaemia Mission (Phase II; 2020-2023)

***Net-Work Programmes of CSIR***

* Nodal CCMB scientist for CSIR-Net-Work programmes during Xth, XIth, XIIth five-year plans

***Multi-Institutional Research Programmes***

* + - Under various grants funded by National funding agencies (from DBT, ICMR, India) and
    - Internationally funded grants from Wellcome Trust, UK; MRC, UK and European Union.

**(ii) Experience of guiding research activities in the area of specialization.**

* + - Published ~120 papers in the area of Human and Medical Genetics, cell biology, genomics, epigenomics, public health, etc.
    - Guided several PhD students and trained several project fellows and research associates
    - Successful in defending various grant proposals to National funding agencies (DBT, DST, ICMR, CSIR) and International funding agencies (Wellcome Trust, UK; MRC, UK; European Union, EU, Indo-Danish Council, Copenhagen, Denmark)

**Professional recognitions, awards, fellowships received**

**Fellowships**

2021 Fellow, Indian National Science Academy, New Delhi, India

2020 Fellow, Indian Academy of Sciences, Bangalore, India

2019 Fellow, The National Academy of Sciences India, Allahabad, India

2017 Fellow, National Academy of Medical Sciences, New Delhi, India

2010 Fellow, Andhra Pradesh Akademi of Sciences, Hyderabad

**Awards**

2018 Dr Prabha Devi Mehra Foundation day Oration, KG Medical University, Lucknow, India

2018 Prof IC Verma Oration Award, Indian Society of Human Genetics, India

2018 Prof SS Agarwal Memorial Lecture, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India

2017 Member, Guha Research Conference, India

2016 Recipient of Dr Yellapragada Subba Row Memorial Oration, at Bezwada Medical Association (IMA), Vijayawada on "Obesity-Diabetes Link: The Y-Y Paradox".

2016 Delivered Dr Yellapragada Subba Row Memorial Lecture, organised by School of Medical Sciences, University of Hyderabad, Hyderabad on “The obesity-diabetes association: What is different in Indians”.

2013 Recipient of ‘Anisya Vasanth Oration’ from NIMHANS, Bangalore

2007 Andhra Pradesh Scientist Award in the field of “New and Emerging Technologies” by Andhra Pradesh State Council of Science and Technology, Government of Andhra Pradesh.

**Adjunct Faculty**

JSS Academy of Higher Education and Research (JSSAHER), Mysore

**Awards to PhD students**

* Prachand Issarapu received **Runner-up** award at K V Rao Research Society, 2019 Hyderabad, India
* Prachand Issarapu received **Young Scientist Award** at 44thAnnual Conference of The Indian Society of Human Genetics, 2019 (India)
* Suraj Singh Nongmaithem received Prof **S S Agrawal Award** in the field of MedicalGenetics in 2018
* Dilip Kumar Yadav received **Young Scientist Award** at 40th Annual Conference of The Indian Society of Human Genetics, 2016, VRF, Chennai (India)
* Suraj Singh Nongmaithem received **Young Scientist Award** at 40th Annual Conference of The Indian Society of Human Genetics, March 2016, VRF, Chennai (India)
* Sumit Paliwal received **First S S Agrawal Award** in the field of MedicalGenetics in 2010
* Sumit Paliwal received **Solvay Research Prize** for best abstract talkat the 41st meeting of the European pancreatic club, 2009, Szeged (Hungary).
* Sumit Paliwal received **Young Scientist Award** at 38th Annual Conference of The Indian Society of Human Genetics, 2012, Varanasi (India)
* Sumit Paliwal received **Young Investigator Award** at Joint Conference of the International Association of Pancreatology& The Indian Pancreas Club, 2011, Cochin (India)

**Distinctions**

**Member**

* Governing Board  of National Institute of Biomedical Genomics (NIBMG), Kalyani, West Bengal
* Biotechnology Research Innovation and Technology Excellence (BRITE) Awards under DBT, New Delhi
* Biomedical and Health Sciences, Science and Engineering Board, DST, New Delhi
* Technical Expert Committee, Chronic Disease Biology, DBT, New Delhi
* Scientific Advisory Council of National Institute of Biomedical Genomics (NIBMG), West Bengal
* Technical & Advisory Monitoring Committee for GenomeIndia & Microbiome Initiative, DBT, New Delhi

**DBT nominee for Institutional Bio-safety Committee**

* Aurobindo Pharma, Hyderabad
* Indian Institute of Technology, Hyderabad
* Vimta Labs Limited, Hyderabad

**Others**

* **Reviewer for International Journals like** PLoS Genetics, Diabetes, Diabetologia, GUT, BMC-series journals, etc.
* **Reviewer for grant proposals from various National and International funding agencies like** Wellcome Trust and MRC, UK; DBT, DST, CSIR, SERB, ICMR in India.
* **Thesis examiner for** Delhi University, Delhi, University of Calcutta, Kolkata, Manipal University, Manipal, etc.
* **Organized** a number of National and International conferences
* **Delivered** a number of invited lectures within and outside the country

**Intellectual property**

* Whole blood/DBS based one-tube diagnostic protocols
  + Hemoglobinopathy
    - One SCA mutation
    - Five common beta thalassemia mutations
  + Musculopathy
    - SMA deletion mutations
* Identified new roles of micronutrients in disease risk prediction
  + Vitamin B12 in risk of neural tube defects, and,
  + Thiamine for risk of Leigh’s Syndrome.

***Technological innovations***

* A 15-gene panel to differentiate between MODY and type 1 diabetes
* A 23-gene panel for screening myopathy patients (especially LGMD) to help Govt Hospitals and NGO like Indian Association of Muscular Dystrophy (IAMD), Muscular Dystrophy Association of India (MDI), etc.

***New products***

* A 9-SNP genetic risk score to differentiate between type 1 and 2 diabetes (Working out the patentability and further application for larger use for disease diagnosis and management).

**Patents**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl**  **No.** | **Title** | **Country** | **Filed on (Date)** | **Granted on (Date)** | **Names of inventors** |
| 1 | A method for detecting genetic disorders (Ref. No. 0087NF2019 ) | IN, WO | 16.05.2019 | Applied | G R Chandak  Sumit Paliwal,  Swati Bayyana,  D Vinay |

**Summary of Publications *(Important publications are marked with a bold and italicized number)***

|  |  |
| --- | --- |
| Total Number | 118 |
| Citations | 9046 |
| h-index | 44 |
| i10-index | 92 |

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|  |

Publications with IF >5.0 37

|  |  |  |
| --- | --- | --- |
| **Journal** | **Impact factor** | **No.** |
| Nature | 42.8 | 6 |
| Lancet | 79.3 | 1 |
| Nature Genetics | 27.6 | 2 |
| Gastroenterology | 17.3 | 1 |
| Nature Communications | 12.1 | 2 |
| Gut | 19.8 | 7 |
| Proc Natl Acad Sci U S A | 9.6 | 1 |
| Clinical Gastroenterology and Hepatology | 8.5 | 1 |
| International Journal Epidemiology | 7.7 | 2 |
| Diabetes | 6.1 | 3 |
| American J Clinical Nutrition | 6.8 | 1 |
| Molecular Cell Proteomics | 5.0 | 1 |
| Diabetologia | 7.5 | 5 |
| Metabolism | 6.2 | 1 |
| Clinical Epigenetics | 5.0 | 1 |
| Human Molecular Genetics | 5.1 | 2 |

**medRxiv/bioRxiv**

1. Satyajeet P. Khare, Ayush Madhok, IndumathiPatta, Krishna K. Sukla, Vipul V. Wagh, Pooja S. Kunte, Deepa Raut, Dattatrey Bhat, Kalyanaraman Kumaran, Caroline Fall, UtpalS. Tatu, **Giriraj R. Chandak**, Chittaranjan Yajnik, Sanjeev Galande. Differential expression of genes influencing mitotic processes in cord blood mononuclear cells after a pre-conceptional micronutrient-based randomized controlled trial: Pune Rural Intervention in Young Adolescents (PRIYA). **medRxiv 2021.08.25.21262585;** doi: https://doi.org/10.1101/2021.08.25.21262585
2. Suraj S Nongmaithem, Robin N Beaumont, Akshay Dedaniya,  Andrew R Wood, Babatunji-William Ogunkolade, Zahid Hassan, Ghattu V Krishnaveni, Kalyanaraman Kumaran, Ramesh D Potdar, Sirajul A Sahariah, Murali Krishna, Chiara Di Gravio, Inder D Mali,  Alagu Sankareswaran, Akhtar Hussain,  Biswajit W Bhowmik,  Abdul Kalam A Khan,  Bridget A Knight, Timothy M Frayling, Sarah Finer, Caroline HD Fall, Chittaranjan S Yajnik,  RachelM Freathy,  Graham A Hitman, **Giriraj R Chandak**.  Associations of genetic scores for birth weight with newborn size and later Anthropometric traits and cardio metabolic risk markers in South Asians.Associations of genetic scores for birth weight with newborn size and later Anthropometric traits and cardiometabolic risk markers in South Asians. **medRxiv 2021.04.16.21254284;doi: https://doi.org/10.1101/2021. 04.16.21254284**
3. Matt J. Silver, et al. Environmentally sensitive hotspots in the methylome of the early human embryo.**BioRxiv 777508; doi: https://doi.org/10.1101/777508**.

**2021**

1. Mahajan A, et. al.Trans-ancestry genetic study of type 2 diabetes highlights the power of diverse populations for discovery and translation. **Nature Genetics. (Accepted in principle). Manuscript ID: NG-A57056R.**
2. Graham SE, et. al. The power of genetic diversity in genome-wide association studies of lipids" **Nature. (Accepted for publication). Manuscript ID: 2020-09-16818D**
3. Murali Krishna, Krishnaveni GV, Veena SR, Kalyanaraman Kumaran, Mohan Kumar, Kiran Nagaraj, Patsy Coakley, Samuel Christaprasad Karat, **Giriraj R Chandak**, Mathew Varghese, Martin Prince, Clive Osmond, Caroline HD Fall. Size at birth, lifecourse factors and cognitive function in late life: Findings from the MYsore study of Natal effects on Ageing and Health (MYNAH) cohort in South India. **International Psychogeriatrics. (Accepted for publication).**
4. Naushin S, et. al. Insights from a Pan India Sero-Epidemiological survey (Phenome-India Cohort) for SARS-CoV2. **eLife. 2021 Apr 20;10:e66537. doi: 10.7554/eLife.66537. Online ahead of print.PMID: 33876727.**
5. Azhar M, Phutela R, Kumar M, Ansari AH, Rauthan R, Gulati S, Sharma N, Sinha D, Sharma S, Singh S, Acharya S, Sarkar S, Paul D, Kathpalia P, Aich M, Sehgal P, Ranjan G, Bhoyar RC; Indian CoV2 Genomics & Genetic Epidemiology (IndiCovGEN) Consortium, Singhal K, Lad H, Patra PK, Makharia G, **Chandak GR**, Pesala B, Chakraborty D, Maiti S. Rapid and accurate nucleobase detection using FnCas9 and its application in COVID-19 diagnosis. **Biosens Bioelectron. 2021 Jul 1;183:113207. doi: 10.1016/j.bios.2021.113207. Epub 2021 Apr 5.PMID: 33866136.**
6. Kumaran K et. al. Protocol for a cluster randomised trial evaluating a multifaceted intervention starting preconceptionally-Early Interventions to Support Trajectories for Healthy Life in India (EINSTEIN): a Healthy Life Trajectories Initiative (HeLTI) Study. **BMJ Open. 2021 Feb 16;11(2):e045862. doi: 10.1136/bmjopen-2020-045862.PMID: 33593789.**
7. Dave MK, Kaur L, Randhir KN, Mehendale SS, Sundrani DP, **Chandak GR**, Joshi SR. Placental growth factor and Fms related tyrosine kinase-1 are hypomethylated in preeclampsia placentae. **Epigenomics. 2021 Feb;13(4):257-269. doi: 10.2217/epi-2020-0318. Epub 2021 Jan 20.PMID: 33471580.**

**2020**

1. Ayden Saffari, Smeeta Shrestha, Prachand Issarapu, Sara Sajjadi,Modupeh Betts, Sirazul Ameen Sahariah, Ashutosh Singh Tomar, Philip James, Akshay Dedaniya, Dilip K. Yadav, Kalyanaraman Kumaran, Andrew M. Prentice, Karen A. Lillycrop, Caroline H.D. Fall, **Giriraj R. Chandak**, Matt J. Silver, and the EMPHASIS Study Group. Effect of maternal preconceptional and pregnancy micronutrient interventions on children’s DNA methylation: findings from the EMPHASIS study. **American Journal of Clinical Nutrition2020 Sep 5:nqaa193. doi: 10.1093/ajcn/nqaa193.**
2. Roopa Rajan, DivyaKp, Rukmini Mridula Kandadai, 20 authors, **Giriraj Ratan Chandak**, 10 authors, Asha Kishore, Manu Sharma. Genetic architecture of Parkinson`s disease in the Indian population: Harnessing genetic diversity to address critical gaps in Parkinson`s Disease research. **Frontiers in Neurology.2020 Jun 18;11:524. doi: 10.3389/fneur.2020.00524.**
3. Maasen K, James PT, Prentice AM, Moore SE, Fall CH,**Chandak GR**, Betts M, Silver MJ, Buxton JL. Periconceptional environment predicts leukocyte telomere length in a cross-sectional study of 7-9-year-old rural Gambian children. **Sci Rep. 2020 Jun 15;10(1):9675. doi: 10.1038/s41598-020-66729-9.**
4. Harrison JW, Tallapragada DSP, Baptist A, Sharp SA, Bhaskar S, Jog KS, Patel KA, Weedon MN,**Chandak GR**, Yajnik CS, Oram RA. Type 1 diabetes genetic risk score is discriminative of diabetes in non-Europeans: evidence from a study in India. **Sci Rep. 2020 Jun 11;10(1):9450. doi: 10.1038/s41598-020-65317-1.**
5. Mani S,**Chandak GR**, Singh KK, Singh R, Rao SN. Novel p.P298L SURF1 mutation in thiamine deficient Leigh syndrome patients compromises cytochrome c oxidase activity.**Mitochondrion. 2020 May 4;53:91-98. doi: 10.1016/j.mito.2020.04.009**.
6. Tanwar VS, Ghosh S, Sati S, Ghose S, Kaur L, Kumar KA, Shamsudheen KV, Patowary A, Singh M, Jyothi V, Kommineni P, Sivasubbu S, Scaria V, Raghunath M, Mishra R, **Chandak GR**, Sengupta S. Maternal vitamin B12 deficiency in rats alters DNA methylation in metabolically important genes in their offspring. **Mol Cell Biochem. 2020 Mar 18. doi: 10.1007/s11010-020-03713-x. PMID: 32189172**
7. Agarwal T, Lyngdoh T, Dudbridge F, **Chandak GR**, Kinra S, Prabhakaran D, Reddy KS, Relton CL, Davey Smith G, Ebrahim S, Gupta V, Walia GK. Causal relationships between lipid and glycemic levels in an Indian population: A bidirectional Mendelian randomization approach. **PLoS One. 2020 Jan 29;15(1):e0228269. doi: 10.1371/journal.pone.0228269. eCollection 2020. PMID:31995593**

**2019**

1. Clark DW, Okada Y, Moore KHS, Mason D, Pirastu N, Gandin I, many authors, **G R Chandak**, many authors, Wilson JF. Associations of autozygosity with a broad range of human phenotypes. **Nat Commun. 2019 Oct 31;10(1):4957. doi: 10.1038/s41467-019-12283-6. PMID:31673082.**
2. Wadhwani NS, Sundrani DP, Wagh GN, Mehendale SS, Tipnis MM, Joshi PC, Kinare AS, Lalwani SK, Mani NS, Chandhiok N, **Chandak GR**, Gupte SA, Fall CHD, Joshi SR. The REVAMP study: research exploring various aspects and mechanisms in preeclampsia: study protocol. **BMC Pregnancy Childbirth. 2019 Aug 23;19(1):308. doi: 10.1186/s12884-019-2450-0.**
3. Lasher D, Szabó A, Masamune A, Chen JM, Xiao X, Whitcomb DC, Barmada MM, Ewers M, Ruffert C, Paliwal S, Issarapu P, Bhaskar S, Mani KR, **Chandak GR,**Laumen H, Masson E, Kume K, Hamada S, Nakano E, Seltsam K, Bugert P, Müller T, Groneberg DA, Shimosegawa T, Rosendahl J, Férec C, Lowe ME, Witt H, Sahin-Tóth M. Protease-Sensitive Pancreatic Lipase Variants Are Associated With Early Onset Chronic Pancreatitis. **Am J Gastroenterol. 2019 Feb 13. doi: 10.14309/ajg. 0000000000000051. [Epub ahead of print]**
4. Dhillon BK, Chopra G, Jamwal M, **Chandak GR**, Duseja A, Malhotra P, Chawla YK, Garewal G, Das R. Adult onset hereditary hemochromatosis is associated with a novel recurrent Hemojuvelin (HJV) gene mutation in north Indians. **Blood Cells Mol Dis. 2018 Nov;73:14-21. doi: 10.1016/j.bcmd.2018.08.003. Epub 2018 Aug 27.**
5. Dilip K Yadav, Smeeta Shrestha, G R Chandak. Identification and Characterization of cis-Regulatory Elements “Insulator and Repressor” in PPARD Gene". Yadav DK, Shrestha S, Dadhwal G, **Chandak GR**. **Epigenomics. 2018 Mar 27. doi: 10.2217/epi-2017-0139.**
6. Jason Flannick, et al. Erratum: Sequence data and association statistics from 12,940 type 2 diabetes cases and controls. **Scientific Data (Nature Group). Sci Data. 2018 Jan 23;5:180002. doi: 10.1038/sdata.2018.2.**
7. Jason Flannick, et al. Sequence data and association statistics from 12,940 type 2 diabetes cases and controls. Scientific Data (Nature Group). **Sci Data. 2017 Dec 19;4:170179. doi: 10.1038/sdata.2017.179.**
8. Yadav DK, Shrestha S. Vitamin B12 supplementation. Dilip K Yadav, Smeeta Shrestha, Karen A Lillycrop, Charu V Joglekar, Hong Pan, Joanna D Holbrook, Caroline HD Fall, C S Yajnik, **Giriraj R Chandak**. Vitamin B12 Supplementation Influences Methylation of Genes Associated with Type 2 Diabetes and its Intermediate Traits. **Epigenomics. 2017 Nov 14. doi: 10.2217/epi-2017-0102.**
9. **Giriraj R Chandak\*,** Matt J Silver\*, Ayden Saffari, Karen A Lillycrop, Smeeta Shrestha, Sirazul Amin Sahariah, Chiara Di Gravio, Gail Goldberg, Ashutosh Singh Tomar, Modupeh Betts, Sara Sajjadi, Lena Acolatse, Philip James, PrachandIssarapu, Kalyanaraman Kumaran, Ramesh D Potdar, Andrew M Prentice, Caroline HD Fall, and the EMPHASIS study group. Protocol for the EMPHASIS study; epigenetic mechanisms linking maternal pre-conceptional nutrition and children’s health in India and Sub-Saharan Africa. **BMC Nutrition.2017 Oct 30;3:81. doi: 10.1186/s40795-017-0200-0.PMID: 30820326.**
10. Prachand I, Paliwal S, Bhaskar S, **Giriraj R Chandak**. Evolution of Phenotypic and Genetic Profile of Tropical Calcific Pancreatitis. In ‘Special types of chronic pancreatitis’. © Springer Nature Singapore Pte Ltd. and Shanghai Scientific and Technical Publishers 2017 Z.-S. Li et al. (eds.), **Chronic Pancreatitis, DOI 10.1007/978-981-10-4515-8\_11**
11. Ahmad M, Sinha A, Ghosh S, Kumar V, Davila S, Yajnik CS, **Chandak GR**. Inclusion of Population-specific Reference Panel from India to the 1000 Genomes Phase 3 Panel Improves Imputation Accuracy (2017). **Sci Rep. 2017 Jul 27;7(1):6733. doi: 10.1038/s41598-017-06905-6.**
12. Khot VV, Yadav DK, Shrestha S, Kaur L, Sundrani DP, Chavan-Gautam PM, Mehendale SS, **Chandak GR**, Joshi SR (2017). Hypermethylated CpG sites in the MTR gene promoter in preterm placenta. **Epigenomics. 2017 Jul;9(7):985-996. doi: 10.2217/epi-2016-0173. Epub 2017 Jun 15.**
13. Murali Krishna, G Mohan Kumar, S R Veena, G V Krishnaveni, Kalyanaraman Kumaran, Samuel Christaprasad Karat, Patsy Coakley, Clive Osmond, John R Copeland, **Giriraj R Chandak**, Dattatray Bhat, Mathew Varghese, Martin Prince, Caroline Fall. Birth size, risk factors across life and cognition in late life: protocol of prospective longitudinal follow-up of the MYNAH (MYsore studies of Natal effects on Ageing and Health) cohort. **BMJ Open 2017;6:e012552. doi:10.1136/bmjopen-2016- 012552.**
14. Boulling A, Masson E, Zou W-B, et al. Identification of a functional enhancer variant within the chronic pancreatitis-associated *SPINK1* c.101A*>*G (p.Asn34Ser)-containing haplotype. **Hum Mutat. 2017 Aug;38(8):1014-1024. doi: 10.1002/humu.23269. Epub 2017 Jun 15.**
15. Manning A, et al. A Low-Frequency Inactivating *Akt2* Variant Enriched in the Finnish Population is Associated With Fasting Insulin Levels and Type 2 Diabetes Risk. **Diabetes. 2017 Jul;66(7):2019-2032. doi: 10.2337/db16-1329. Epub 2017 Mar 24.**
16. Nongmaithem SS, Joglekar CV, Krishnaveni GV, Sahariah SA, Ahmad M, Ramachandran S, Gandhi M, Chopra H, Pandit A, Potdar RD, Hd Fall C, Yajnik CS, **Chandak GR**. GWAS Identifies Population Specific New Regulatory Variants in FUT6 Associated with Plasma B12 Concentrations in Indians.**Hum Mol Genet. 2017 Feb 27. doi: 10.1093/hmg/ddx071**.
17. Marikanty RK, Gupta MK, Cherukuvada SV, Kompella SS, Prayaga AK, Konda S, Polisetty RV, Idris MM, Rao PV, **Chandak GR**, Dakshinamurty KV. Identification of urinary proteins potentially associated with diabetic kidney disease. **Indian J Nephrol. 2016 Nov-Dec;26(6):434-445.**
18. Fuchsberger C, et al. Genetic architecture of type 2 diabetes. **Nature;536(7614):41-7.**

***[Accompanied by Editorial Commentary, Rich SS. (2016). “Still a geneticist’s nightmare”. Nature* 536(7614):37-8**

1. Zou WB, Boulling A, Masamune A, Issarapu P, Masson E, Wu H, Sun XT, Hu LH, Zhou DZ, He L, Fichou Y, Nakano E, Hamada S, Kakuta Y, Kume K, Isayama H, Paliwal S, Mani KR, Bhaskar S, Cooper DN, Férec C, Shimosegawa T, **Chandak GR**, Chen JM, Li ZS, Liao Z. No Association Between CEL-HYB Hybrid Allele and Chronic Pancreatitis in Asian Populations. **Gastroenterology. 2016; 150(7);1558-60**. **(COVER PAGE)**

***[Accompanied by Editorial Commentary, Molven A, Fjeld K and Lowe ME (2016). “Lipase Genetic Variants in Chronic Pancreatitis: When the End Is Wrong, All’s Not Well”. Gastroenterology” 150: 1515-18].***

1. Ahmad M, Nongmaithem SS, Krishnaveni GV, Fall CH, Yajnik CS, **Chandak GR**. Lack of replication of association of THSD7A with obesity.**Int J Obes (Lond). 2016 Apr;40(4):725-6**.
2. Pattaro C, et al. Genetic associations at 53 loci highlight cell types and biological pathways relevant for kidney function. **Nat Commun. 2016 Jan 21;7:10023. doi: 10.1038/ncomms10023.**
3. Paliwal S, Bhaskar S, Reddy DN, Rao GV, Thomas V, Singh SP, **Chandak GR**. Association Analysis of PRSS1-PRSS2 and CLDN2-MORC4 Variants in Nonalcoholic Chronic Pancreatitis Using Tropical Calcific Pancreatitis as Model.**Pancreas. 2016 Jan 18. Sep;45(8):1153-7. doi: 10.1097/MPA.0000000000000608.PMID: 26784911.**
4. Shadab Ahmad, TrayambakBasak, K Anand Kumar, Gourav Bhardwaj, Lalitha A,Dilip K Yadav, **Chandak GR**, Manchala Raghunath, Shantanu Sengupta (2015). Maternal micronutrient deficiency leads to alteration in the kidney proteome in rat pups. **J Proteomics. 2015 Sep 8;127(Pt A):178-84. doi: 10.1016/j.jprot.2015.04.035. Epub 2015 May 14.**
5. Joshi PK, et al (2015). Directional dominance on stature and cognition in diverse human populations. **Nature. 2015 Jul 23;523(7561):459-62. doi: 10.1038/nature14618. Epub 2015 Jul 1**.
6. Locke AE, et al (2015). Genetic studies of body mass index yield new insights for obesity biology. **Nature. 2015 Feb 12;518(7538):197-206. doi: 10.1038/nature14177.**
7. Shungin D et al (2015). New genetic loci link adipose and insulin biology to body fat distribution. **Nature. 2015 Feb 12;518(7538):187-96. doi: 10.1038/nature14132.**
8. Kumar KA, Lalitha A, Reddy U, **Chandak GR**, Sengupta S, Raghunath M. Chronic maternal vitamin B12 restriction induced changes in body composition & glucose metabolism in the Wistar rat offspring are partly correctable by rehabilitation. **PLoS One. 2014 Nov 14;9(11):e112991. doi: 10.1371/journal.pone.0112991. eCollection 2014.**
9. C S Yajnik**, G R Chandak**, C Joglekar, P Katre, D S Bhat, S N Singh, C S Janipalli, H Refsum, G Krishnaveni, S Veena, C Osmond, CHD Fall. Maternal homocysteine in pregnancy and offspring birthweight: Epidemiological associations and Mendelian randomizationanalysis. **Int J Epidemiology 22 July 2014. Epub ahead of print. PMID: 25052622.**

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***[Based on this paper, Tropical Calcific Pancreatitis has been recognized as a genetic disease and given a number sign (#) in the Online Mendelian Inheritance in Man (OMIM) and has been assigned a number #608189]***

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**Scientific reviews**

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2. **G R Chandak** and J Hemavathi (2007). Biomarkers and Clinical Genomics:Genetic Disorders and Approaches to their Prevention**.In BioArrays: From Basics to Diagnostics. Ed. KrishnaraoAppasani, Humana Press, New Jersey, USA, pp 243-260**.
3. **G R Chandak**, M Mohd Idris, D Nageshwar Reddy, K Radha Mani, S Bhaskar, Swapna Mahurkar, G V Rao (2006). Genetic Studies in Chronic Pancreatitis in India. In Chronic Pancreatitis and Pancreatic Diabetes in India.  Eds V Balakrishnan, Harish kumar, S Sudhindran, A G Unnikrishnan, LG Creations, Bangalore, **pp 243-260.**
4. **G R Chandak** (1998)."Triplet Repeats in Neurological Disorders"Reviews in Neurology, Indian Academy of Neurology, 1998. Ed. S M Das, R Borgohain, A K Meena. **pp 39-47**.

# Entries in Online Mendelian Inheritance in Man (OMIM)

1. **#608189 - TROPICAL CALCIFIC PANCREATITIS**

Cytogenetic locations: 5q32

OMIM: 608189

2. **\*116810 - CATHEPSIN B; CTSB**

Cytogenetic locations: 8p23.1

OMIM: 116810

3. **\*167790 - SERINE PROTEASE INHIBITOR, KAZAL-TYPE, 1; SPINK1**

Cytogenetic locations: 5q32

OMIM: 167790

**National and International grants (In last 5 years)**

* Awarded Grant titled “OPTIMISE: Optimal preconception nutrition to offset inflammation and non-communicable disease risk in pregnant women and their children” by MRC, UK with Dr K Kumaran from HMH, Mysore, Dr Stephen Mathews, Canada and Dr Caroline Fall from UK.
* Awarded the Phase II of Project titled “CSIR-Sickle Cell Anemia Mission” from CSIR (Mission Director) a multi-institutional grant involving six CSIR institutes and six non-CSIR institutes.
* Awarded Grant titled “Early interventions to support trajectories for healthy life in India (EINSTEIN)” by DBT, India with Dr K Kumaran from HMH, Mysore and Dr Stephen Mathews, Canada.
* Awarded Grant titled “Influence of Maternal One-Carbon (1C) Metabolism in Placental function, Fetal growth and programming’ from DBT, India with Dr Sadhana Joshi and Prof C S Yajnik, Pune.
* Awarded Pump Priming Grant titled “Early life origins of brain resilience to mental illness and cognitive impairment in Indian and Scottish cohorts: A data science approach. MRC, UK with Dr K Kumaran from HMH, Mysore and Prof
* Awarded the Mission Mode Project titled “CSIR-Sickle Cell Anemia Mission” from CSIR as a multi-institutional grant involving seven CSIR institutes and 3 non-CSIR institutes.
* Awarded Centre for Advanced Research titled **“Investigating Mechanisms leading to Pre-eclampsia”** by ICMR as a collaborative project with Dr Sadhana Joshi at IRSHA, Pune.
* Awarded Grant titled **“Prevalence and predictors of vitamin B12 deficiency: genetic associationsfor low vitamin B12 levels - multi-center a pan India study”** by DBT as a multi-Centre collaborative project with NIN, IGIB, BHU, SJRC and KEMHRC.
* Awarded the DBT-MRC Newton Fund Grant titled Centre of Excellence on Fetal Programming entitled **“Epigenetic mechanisms linking maternal pre-conceptional micronutrient supplementation with offspring health in India and Gambia (EMPHASIS),** in collaboration with Prof Caroline Fall, University of Southampton, UK and Dr Andrew Prentice, LSHTM, UK.
* Awarded the Centre of Excellence on Fetal Programming entitled **“The inter-generational programming of health and disease in Indians”,** in collaboration with Prof C S Yajnik, KEM Hospital and Research Centre, Pune, India; Sanjeev Galande, IISER, Pune and Partha Majumder, NIBMG, Kalyani.
* Awarded the Indo-Danish Grant entitled **“The role of epigenetics in the vicious cycle of diabetes and pregnancy (VICIDYP)- Intergenerational programming of diabesity in offspring of women with Gestational Diabetes Mellitus (InDiaGDM)”**, in collaboration with Prof Allan Vaag, University of Copenhagen, Denmark.