

A Central University (NAAC Accredited A++ Grade)

#### Dr. Praveen Kumar Pathak

Associate Professor of Geography, Jamia Millia Islamia, New Delhi

Title Dr.	First Name Prav		Pathak	Photograph
Designation	Associate Professor			
Office Address	Department of Geography Faculty of Natural Sciences Jamia Millia Islamia (Central University) New Delhi- 110 025			
Phone No. (Office) (Personal)	+91-11-26981717; (Extn.)- 3310 +91- 8826048740			
Email Address	pkpathak@jmi.ac.in pathakprave@gmail.com			
Web-Page	https://www.jmi.ac.in/geography			
Educational Qualifications				
Degree	Institution			Year
Ph.D.	International Institute for Population Sciences (IIPS), Mumbai, India		2016 (Population Studies)	
M. Phil	International Institute for Population Sciences (IIPS), Mumbai, India		2008 (Population Studies)	
PG	Banaras Hindu University (BHU), Varanasi, India		2006 (Geography)	
UG	Ewing Christian College (ECC), University of Allahabad, Allahabad, India			2004 (Geography, English Literature, Education)
Any other qualification	JRF/SRF- University Grants Commission (UGC), New Delhi, India			2007-2010
Career Profile				

#### Career Profile

- Associate Professor, Department of Geography, Faculty of Natural Sciences, Jamia Millia Islamia (Central University), New Delhi (30<sup>th</sup> December, 2019 onwards)
- Assistant Professor, Department of Geography, Delhi School of Economics, University of Delhi, Delhi (25<sup>th</sup> March, 2014- 30<sup>th</sup> December, 2019).
- Assistant Professor, Department of Geography, Faculty of Science, University of Pune, Pune, Maharashtra (22<sup>nd</sup> March, 2013 – 24<sup>th</sup> March, 2014).
- Assistant Professor, Department of Geography, Faculty of Science, Shivaji University, Kolhapur, Maharashtra (20<sup>th</sup> December, 2010 – 21<sup>st</sup> March, 2013).
- Assistant Professor, Department of Applied Geography, School of Regional Studies and Earth Sciences, Ravenshaw University, Cuttack, Odisha, (1st October, 2010 – 19th December, 2010)
- Research Officer, International Institute for Population Sciences, Mumbai, Maharashtra (1<sup>st</sup> January – 28<sup>th</sup> February, 2008)



A Central University (NAAC Accredited A++ Grade)

### Administrative Assignments

- Advisor, PhD Programme in Geography, JMI, New Delhi (July, 2020 to August, 2021)
- Member, Department Library Committee, JMI, New Delhi (Since July, 2020)
- Nodal Officer-NAAC, Department of Geography, Delhi School of Economics, University of Delhi, (2014-15, 2015-16, 2016-17)

## Areas of Interest / Specialization

- Geospatial Analysis of Population, Environment & Health
- Social Networks and Demographic Behavior
- Population and Development Policies
- Spatial and Quantitative Methods

## **Subjects Taught**

## **BA/BSc (Honors) Geography Program**

- Population and Development [GEB-H-503]
- Sustainable Development [GEB-H-504]

#### M.A. Geography Program

- Data Analysis in SPSS [GGM-305]
- Research Methodology [GGM-207]
- Geography of Health and Well-being [GGM-403(B)]
- Demography and Population Policies [423]
- Statistical Techniques in Spatial Analysis [104]
- Biogeography [GGM-202]
- Social Geography of India [305]
- Cultural Geography [308]
- Project Report [401]

### **D.Phil. Geography Program**

Research Methodology [GGD-201]

#### Research Guidance

- 1. Supervision of submitted/awarded Doctoral Thesis: 01
  - i) Mr. Suraj Pal: Analyzing Social Stigma and Health Risks among Men Having Sex with Men: ACase Study of Selected Indian Cities [PhD Degree Awarded in Geography, Delhi School of Economics, University of Delhi, 16<sup>th</sup> June 2022]
- 2. Supervision of Doctoral Thesis, under progress: 03
  - i) Ms. Pratibha Tomar: Dynamics of husband's migration, women autonomy, and reproductive behavior: a case study of Eastern Uttar Pradesh. [Ongoing since May, 2019]
  - ii) Ms. Vedika Maheswari: Heat wave related risk, vulnerabilities and mitigation- an assessment of occupational heat stress among outdoor workers in NCT of Delhi. [Ongoing since September, 2021]
  - iii) Ms. Kashfi Nigar: Healthy greying: exploring the physical and mental health of older population in India [Ongoing since September, 2021]
- 3. Supervision of awarded M.Phil dissertations: 02
  - i) Ms. Purva Bhalla: Life style choices and health status among young girls in Urban Delhi [Degree Awarded in January 2017]
  - ii) Mr. Pratap Singh: Men's involvement in family planning and reproductive health of womenin Uttar Pradesh, India. [Degree Awarded in June 2021]



A Central University (NAAC Accredited A++ Grade)

#### **Publications Profile**

#### **Journal Articles:**

- 1) Pal, S., **Pathak, P.K.** (2021) Demographic and Socioeconomic Correlates of Violence against Sexual Minorities across Selected Indian Cities. *Uttar Pradesh Geographical Journal* (A UGC Care List Journal) 26: 32-41.
- Pathak, P.K., Singh, Y., Mahapatro, S., Tripathi, N., Jee, J. (2020) Assessing Socioeconomic Vulnerabilities related to COVID-19 Risk in India: A State-level Analysis. *Disaster Medicine and Public Health Preparedness* (Accepted Manuscript - In Press) DOI: 10.1017/dmp.2020.348
- 3) Anukriti, S., Herrera-Almanza, C., **Pathak, P.K.**, Karra, M. (2020) Curse of the Mummy-ji: the influence of mothers-in-law on women in India. *American Journal of Agricultural Economics* 102(5): 1328-1351. DOI:10.1111/ajae.12114
- 4) Kim, R., **Pathak, P.K.,** Tripathi, N., Subramanian, S.V. (2020) Heterogeneity in adult anthropometry by socioeconomic factors: Indian National Family Health Survey 2006 and 2016. **European Journal of Clinical Nutrition** 74: 953-960.
- 5) Kim, R., **Pathak, P.,** Xu, Y., Joe, W., Kumar, A., Venkataramanan, R., Subramanian, S. (2019) Microgeographic targeting of precision public policy: an analysis of child sex ratio across 587,043 Census villages in India, 2011. *Health and Place* 57: 92-100.
- 6) Singh, A., Kumar, **Pathak, P.K.**, K., Chauhan, R., Banerjee, A. (2017) Spatial patterns and determinants of fertility in India. *Population (English)* 72(3): 505-526.
- 7) **Pathak, P.K.** (2015) Women's social network and use of family planning methods in rural Uttar Pradesh, India. *National Geographical Journal of India* 61: 287-306.
- 8) **Pathak, P.K.**, Tripathi, N., Subramanian, S.V. (2014). Secular trends in menarcheal age in India: Evidence from the Indian Human Development Survey. *PLoS ONE* 9 (11): e111027. DOI: 10.1371/journal.pone.0111027.
- 9) Jain, N., Singh, A. and **Pathak, P.K.** (2013). Infant and child mortality in India: trends in inequalities across economic groups. *Journal of Population Research* 30: 347-365.
- 10) Singh, A., **Pathak, P.K.,** Chauhan, R.K. and Pan, W. (2011). Infant and child mortality in India in the last two decades: a geospatial analysis. **PLoS ONE** 6(11): e26856. DOI:10.1371/journal.pone.0026856.
- 11) **Pathak, P.K.** and Singh, A. (2011). Trends in malnutrition among children in India: growing inequalities across different economic groups. *Social Science and Medicine* 73: 576-585.
- 12) Prakash, R., Singh, A., **Pathak, P.K.** and Parasuraman, S. (2011). Early marriage, poor reproductive health status of mother and child well-being in India. *Journal of Family Planning and Reproductive Health Care* 37: 136-145.
- 13) **Pathak, P.K.**, Singh, A. and Subramanian, S.V. (2010). Economic inequalities in maternal health care: prenatal care and skilled birth attendance in India, 1992-2006. **PLoS ONE** 5(10): e13593. DOI:10.1371/journal.pone.0013593.
- 14) **Pathak, P.K.** and Mohanty, S.K. (2010). Does the safe-motherhood programme reach the poor in Uttar Pradesh, India? *Asian Population Studies* 6: 173-191.
- 15) Mohanty, S.K. and **Pathak, P.K.** (2009). Rich-poor gap in utilization of reproductive and child health services in India, 1992-2005. *Journal of Biosocial Science* 41: 381-398.



A Central University ( NAAC Accredited A+++ Grade )

#### **Book/Chapter in Book**

- 1) Rahman, A., Siddiqui, L., **Pathak, PK**, Bansal, T., Asif, A. (2021) Sustainable development, environmental issues and self-sustained society. RK Books: New Delhi.
- 2) Prakash, R., **Pathak, P.K.** (2012) *Inequality in household environmental standard and health outcomes in India*. In: *Civil Society and Health*. M.R.Pradhan, A.K.Patra, R.L. Panigrahy (Eds.) Discovery Publishing House (DPH) Pvt. Ltd., New Delhi, India.
- 3) **Pathak PK** (2010). Wealth Inequalities and Use of Reproductive and Child Health Services-Insight from Indian National Family Health Survey, ISBN: 978-3-639-25895-0, VDM Publishing House Ltd., Germany.
- 4) Pathak, P.K., Mohanty, S.K., Prakash, R. and Kujur, A. (2010). Socioeconomic inequalities in delivery care in India. In: *Population, Gender and Health in India: Methods, Processes and Policies*. K.S. James, ArvindPandey, Dhananjay W Bansod and LekhaSubaiya (Eds.) Academic Foundation, New Delhi, India, pp: 447-460.
- 5) **Pathak, P.K.** and Singh, A. (2009). Geographical variation in poverty and child malnutrition in India. In: *Population, Poverty and Health: Analytical Approaches* .K.K. Singh, R.C. Yadava and Arvind Pandey (Eds.) Hindustan Publishing Corporation, New Delhi, India, pp: 183-206.

## Invited Lecture/Conference Organization/ Presentations (in the last seven years)

- 'Determinants and consequences of fertility transition', Platinum Jubilee Lecture Series, Department of Geography, Faculty of Science, Banaras Hindu University, 13<sup>th</sup> January, 2022. <a href="https://www.youtube.com/watch?v=L8UoTGZkq8A&t=1651s">https://www.youtube.com/watch?v=L8UoTGZkq8A&t=1651s</a>
- 2) 'Exploratory Geospatial Data Analysis in Population Health' DST's Geospatial Capacity Building (Level 1) Program, **Suresh Gyan Vihar University**, **Jaipur**, 11<sup>th</sup> January 2022.
- 3) 'Determinants and consequences of fertility transition', **Department of Geography, Dayanand Anglo-Vedic (PG) College**, Chhatrapati Sahuji Maharaj University, Kanpur, Uttar Pradesh, 5<sup>th</sup> January, 2022.
- 4) 'Research Design in Geographical Studies', **Department of Geography, Dayanand Anglo-Vedic (PG) College**, Chhatrapati Sahuji Maharaj University, Kanpur, Uttar Pradesh, 4<sup>th</sup> January, 2022.
- 5) 'Geographical Perspective on Health and Well-being in India' during 43rd Indian Geography Congress Focal Theme: Population, Environment, Health, Sustainable Development Goals and Appropriate Technologies: Post-COVID-19 Scenarios, **Department of Geography, Institute of Science, Banaras Hindu University**, Varanasi, Uttar Pradesh, October 28-30, 2021.
- 6) 'Skill and Knowledge Creation among Youth for Atmanirbhar Bharat in the 21st Century: Leveraging Strengths and Opportunities', Refresher Course on Re-inventing Skill Education, in the Light of New Education Policy (2020), Ramanujan College, University of Delhi, 14 September, 2021.
- 7) 'New Educational Policy (2020): Role of Geography Teachers', **Dr B.R. Ambedkar University of Social Sciences, Mhow, Indore & Bhartiya Sikshan Mandal**, 2<sup>nd</sup> September 2021.
- 8) 'Geospatial approach to public health related disasters', National Institute of Rural Development and Panchayati Raj, Hyderabad, 22<sup>nd</sup> July 2021.
- 9) 'Socioeconomic vulnerabilities of COVID-19 risk in India: A State-level analysis' ICRIER-KAS Webinar on Tackling COVID-19: Public Health and Socioeconomic Strategies, 02<sup>nd</sup> July 2021. <a href="https://www.youtube.com/watch?v=17HLPcbrlUs&t=6738s">https://www.youtube.com/watch?v=17HLPcbrlUs&t=6738s</a>



A Central University (NAAC Accredited A++ Grade)

- 10) 'Tracking sub-national vulnerabilities and policy response to COVID-19 risk in India, National Seminar on Population and Resource Management, **Padmashri Vikhe Patil College of Arts, Science and Commerce, Pravaranagar, Ahmednagar**, Maharashtra, 6<sup>th</sup> April 2021
- 11) 'Population Dynamics and COVID-19: Indian Experience', UGC-STRIDE Program, Shivaji University, Kolhapur, Maharashtra, 02<sup>nd</sup> February, 2021.
- 12) 'Population, Gender and Sustainability Issues in Indian Context', Gyan Ganga Program, Government Lohia Postgraduate College, Churu, Rajasthan, 29<sup>th</sup> January, 2021.
- 13) 'Quantitative Technique in Research', 3<sup>rd</sup> Online One Month Faculty Induction Programme, UGC-HRDC, **Jamia Millia Islamia**, **New Delhi**, 14<sup>th</sup> January 2021.
- 14) 'Addressing Gender Equality for Sustainable Development: Lessons from India, 1st Two Weeks Refresher Course (ONLINE) in Environment and Sustainable Development, UGC-HRDC, **University of Rajasthan, Jaipur**, 12th January 2021.
- 15) 'Application of Quantitative Research Techniques', 1<sup>st</sup> Online One Week Workshop on Research Methodology, UGC-HRDC, **Jamia Millia Islamia, New Delhi**, 21<sup>st</sup> December 2020.
- 16) 'Emerging Issues and Challenges of Urban Housing in Poorvanchal, Uttar Pradesh', National Seminar on Sustainable Development of Poorvanchal: Issues, Strategies and Way Forward, **DDU Gorakhpur University, Gorakhpur, Uttar Pradesh**, 10-12 December 2020.
- 17) Invited Online Lecture on *'Gender, Reproductive Health, and Sustainable Development Goals: An Indian Perspective'*, Short term course of Gender Sensitization & Social Justice, **UGC-HRDC, Jawaharlal Nehru University (JNU), New Delhi**, 25<sup>th</sup> September, 2020.
- 18) Invited Online Lecture on *'COVID-19 and Population Migration: Socioeconomic Impact'*, **Indira Gandhi National Tribal University (IGNTU), Amarkantak**, Madhya Pradesh, India, 11<sup>th</sup> July, 2020.
- 19) Invited Online Lecture on *'Recent Trends in Geography'*, Department of Geography, **Shivaji University**, **Kolhapur**, Maharashtra, India, 04<sup>th</sup> May, 2020.
- 20) Invited Lecture on 'Perspectives on Health and Well-being in India' at the Aditi Mahavidyalaya, University of Delhi, 21st February, 2019.
- 21) Invited Lecture on 'Analysing Trends and Social Differentials in Infertility in India: Evidence from the NFHS', Lecture Series, India Policy Foundation, 19<sup>th</sup> January, 2019.
- 22) Invited Lecture on 'Population Health in India: Progress, Issues and Challenges' under the Research Methodology Workshop on "Livelihood, Health and Well-being of Marginalized Groups in India. Institute of Economic Growth (IEG), New Delhi, 26 March 2018.
- 23) Invited Lecture on 'Reflections on Demographic Challenges in India', Indraprastha College for Women, University of Delhi, New Delhi, 21 September, 2017.
- 24) International Workshop on Modelling and Projecting Subnational Population Trends, Asian Demographic Research Institute (ADRI), **Shanghai University**, Shanghai, China, April, 2017.
- 25) International Conference on Productive Ageing in Asia, Asian Research Institute (ARI), **National University of Singapore** (NUS), Singapore, March 2017.
- 26) 37<sup>th</sup> Annual Conference of the Indian Association for the Study of Population (IASP), **Institute of Economic Growth** (IEG), Delhi, December, 2016.
- 27) Annual Meeting of the Population Association of America (PAA), **San Diego, California, USA**, May, 2015.



A Central University (NAAC Accredited A++ Grade)

### Research Projects (Major Grants/Research Collaboration)

- 1) Networks and Global Health: Experimental Evidence of Women's Social Networks, Reproductive Health, and Well-Being in Developing Countries (Funded by BU Global Programs- Boston University Foundation India, Seed Fund Program) Grant Amount USD 30,000/- [Dr. Praveen K. Pathak- Indian PI; Dr. Mahesh V. Karra, Boston University, USA] 2020-2021.
- 2) Networks and Global Health: Experimental Evidence of Women's Social Networks, Reproductive Health, and Well-Being in Developing Countries (Funded by Northeastern University, Boston, USA). Grant Amount USD 43,020/- [Dr. Praveen K. Pathak- Indian PI; Dr. Catalina Herrera-Almanza, Northeastern University, Boston, USA] August 2017- September, 2019.
- 3) **Geospatial Analysis of Juvenile Sex Ratios in India**, Sanctioned by the University of Delhi- Research and Development Grant 2014-15. Grant Amount: Rs. 85,000/- [Dr. Praveen K. Pathak PI]

Awards and Distinctions	
April 2017	Received Grant to Participate in the International Workshop on Sub-
	National Population Projections, Asian Demographic Research Institute
	(ADRI), Shanghai University, Shanghai, China, April 7-11, 2017.
September, 2015	Offered Two Years Post-Doctoral Position at the Centre for Demographic
	Studies (CED), University Autonoma Barcelona (UAB), Barcelona, Spain.
June – July 2014	Guest Researcher, Vienna Institute of Demography (VID), Austrian
	Academy of Sciences (AAS), Vienna, Austria.
2013-2014	Population Reference Bureau (PRB) Policy Communication Fellows
	Program, Washington DC, USA.
June - August 2013	Young Scientists Summer Program (YSSP), International Institute for
-	Applied Systems Analysis (IIASA), Laxenburg, Vienna, Austria.
January 2013	GMHC Travel Grant, 2 <sup>nd</sup> Global Maternal Health Conference
	(GMHC), Arusha, Tanzania.
August 2012	APA Partial Travel Grant, 2 <sup>nd</sup> Asian Population Association (APA)
	Conference, Bangkok, Thailand.
October 2010	ICUH Partial Travel Grant, 9th International Conference on Urban Health
	(ICUH) Meeting, New York City, USA.
2010	Research Grant for PhD Data Collection, London School of Hygiene and
	Tropical Medicine, University of London, UK.
2010	University Grants Commission (UGC)-Senior Research Fellowship (SRF)
	during PhD Program at International Institute for Population Sciences
	(IIPS), Mumbai, India (April 2010 to September, 2010).



A Central University ( NAAC Accredited A+++ Grade )

2010-2007	University Grants Commission (UGC)-Junior Research Fellowship (JRF) during M.Phil./PhD Program at International Institute for Population Sciences (IIPS), Mumbai, India (June 2007 to April 2010).
September 2009	IUSSP Travel Grant, 26 <sup>th</sup> Meeting of International Union for the Scientific Study of Population (IUSSP), Marrakech, Morocco.
May 2009	Visiting Fellow, Harvard Centre for Population and Development Studies, Harvard University, Boston, United States of America.
April 2009	Visiting Fellow, Initiative for Population Research (IPR), Ohio State University, Columbus, Ohio, USA.
April 2009	PAA Travel Grant, 74 <sup>th</sup> Annual Meeting of Population Association of America (PAA), Detroit, Michigan, USA.
2009	Dr. K. B. Pathak Memorial Award, Best Published Paper of the Year (2009) by a Young Demographer in 31 <sup>st</sup> Annual Conference of Indian Association for the Study of Population (IASP), Sri Venkateswara University, Tirupati, Andhra Pradesh.
2008	Dr. S.N. Memorial Award, Best Poster Paper (2008), 30 <sup>th</sup> Annual Conference of Indian Association for the Study of Population (IASP), Institute for Social and Economic Change (ISEC), Bangalore, Karnataka.
2007-2006	Government of India Fellowship, Master in Population Studies, International Institute for Population Sciences (IIPS), Mumbai, India.
2006	Banaras Hindu University (B.H.U.) Gold Medal for standing First at the M.A. /M.Sc. (Final) Geography Examination-2006, Banaras Hindu University, Varanasi, Uttar Pradesh, India.

### **Association with Professional Bodies**

- 1) International Union for the Scientific Study of Population (IUSSP)
- 2) Population Association of America (PAA)
- 3) Indian Association for the Study of Population (IASP)
- 4) Asian Population Association (APA)
- 5) Indian Association for Social Sciences and Health (IASSH)

#### Organization of Training Workshop/UGC-HRDC Refresher Course/ Seminar/Conferences

- 1) Work-in-Progress Seminar under the Multicenter Collaborative Research Project entitled 'Network and Global health: Experimental Evidence on Women's Social Network, Reproductive Health and Well-being in Developing Countries', Conference Hall, International Guest House, University of Delhi (North Campus), 02<sup>nd</sup> July, 2019.
- 2) Celebration of the World Population Day-2019 under the theme 'ICPD 25+ Investing in Gender Equality and Reproductive Health for Sustainable Development', Department of Geography, Delhi School of Economics, University of Delhi in association with the Indian Association for the Study of Population (IASP), New Delhi, 11<sup>th</sup> July, 2019.



A Central University (NAAC Accredited A++ Grade)

- 3) 18<sup>th</sup> (1<sup>st</sup> Online) Refresher Course in Geography and Environmental Studies, UGC-HRDC, Jamia Millia Islamia in collaboration with Department of Geography, Jamia Millia Islamia, New Delhi, 09-24 November, 2020.
- 4) Celebration of the World Population Day-2021 under the theme 'Rights and Choices', Department of Geography, Jamia Millia Islamia, New Delhi, 13<sup>th</sup> July, 2021.
- 5) 19<sup>th</sup> (2<sup>nd</sup> Online) Refresher Course in Geography and Environmental Studies, UGC-HRDC, Jamia Millia Islamia in collaboration with Department of Geography, Jamia Millia Islamia, New Delhi, 18<sup>th</sup> January-1<sup>st</sup> February 2022.

## Orientation/Refresher Course (Attended)

- 1) Three Weeks Refresher Course on 'Disaster Management', UGC-Academic Staff College, Kumaun University, Nainital, Uttarakhand, India. February 07 to 21, 2015.
- 2) Four Weeks Orientation Course, UGC-Human Resource Development Centre, Jamia Millia Islamia University, New Delhi, India. November-December, 2015.

## Professional Activities (External Examiner of PhD Thesis)

- 1) International Institute for Population Sciences, Mumbai
- 2) Jawaharlal Nehru University, New Delhi
- 3) Suresh Gyan Vihar University, Jaipur
- 4) University of Delhi, New Delhi
- 5) University of Madras, Chennai
- 6) Veer Bahadur Singh Purvanchal University, Jaunpur

#### Expert of National Level Examination/Paper Setting

- 1) UGC-NET Examination (Population Studies), National Testing Agency, Ministry of Education, Government of India
- 2) UGC-CUET Entrance Examination (Geography), National Testing Agency, Ministry of Education, Government of India
- 3) Jharkhand Public Service Commission
- 4) Uttarakhand Public Service Commission
- 5) University of Delhi
- 6) Jamia Millia Islamia
- 7) Jawaharlal Nehru University

#### Academic Editor and Reviewer of Scientific Research Journals

- 1) Academic Editor, PLOS ONE (2022 onwards)
- 2) Guest Editor- Frontiers in Global Women's Health- Special Issue on 'Gender Inequalities, Sexual and Reproductive Health, and Sustainable Development in the Global South' (May 2022) <a href="https://www.frontiersin.org/research-topics/37224/gender-inequalities-sexual-and-reproductive-health-and-sustainable-development-in-the-global-south">https://www.frontiersin.org/research-topics/37224/gender-inequalities-sexual-and-reproductive-health-and-sustainable-development-in-the-global-south</a>

### Reviewer of Scientific Peer-Reviewed Journals

Social Science & Medicine, Health & Place, PLOS ONE, Health Policy & Planning, Asian Population Studies, Journal of Biosocial Science, Public Health, PLOS-Global Health, PLOS-Medicine, Child & Youth Services Review, SSM-Public Health, Disaster Medicine and Public Health Preparedness, BMJ-Open, Tropical Medicine & International Health, The Oriental Anthropologist, Journal of Epidemiology & Community Health, Scientific Reports, Asia-Pacific Journal of Public Health, International Journal of Equity in Health, BMC-Public Health

Signature of Faculty Member 24<sup>th</sup> June 2022