

Muhammad Asghar

Professor

School of Mechanical & Manufacturing Engineering

Email: principal-asab@nust.edu.pk

Contact:



About

Dr. Muhammad Asghar is working as Professor in the School of Mechanical & Manufacturing Engineering. Dr. Muhammad Asghar has a PhD in Biology/Ecology. Dr. Muhammad Asghar has published 42 research articles & conference papers having a citation count of 1815, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Biology/Ecology Lund University , Sweden	2010 - 2013
MS in Biology/Ecology Lund University , Sweden	2007 - 2009
BS in Zoology BZU, Multan , Pakistan	2002 - 2006

Experience

Professor School of Mechanical & Manufacturing Engineering	2025- Present
Professor Atta-Ur-Rahman School of Applied Biosciences	2023 - 2023
Senior Researcher/Docent Lund University , Lund University	2022 - 2023
Docent/Associate Professor Karoliska Institutet, Sweden , Karoliska Institutet, Sweden	2021 - 2022
Senior Researcher Karoliska Institutet, Sweden , Karoliska Institutet, Sweden	2019 - 2022
Assistant Professor Karoliska Institutet, Sweden , Karoliska Institutet, Sweden	2017 - 2019
Postdoctoral Fellow Karoliska Institutet, Sweden , Karoliska Institutet, Sweden	2013 - 2017
Postdoctoral Fellow Lund University , Lund University	2012 - 2013

Research Articles

Infection length and host environment influence on Plasmodium falciparum dry season reservoir <i>Carolina N Andrade Manuela Carrasquilla Usama Dabbas Jessica Briggs Hannah Van Dijk Nikolay Serjeev Moussa Niangaly Awa Sissoko Christina Natala Emily Lavarriere Jeff Skinner Klara Golob Jeremy Richter Hamidou Cisse Shanping Li Jason A Handry Muhammad Asghar Didier Doumtabe Anna Farnert Thomas Roppert Daniel E Neafsey Kassoum Kayentao Safiatou Doumbo Aissata Ongoiba Peter D Compton Boubacar Taraoro Bryan Greenhouse Silvia Portugal</i> <i>EMBO Molecular Medicine</i> , Volume 16, Issue 10, Pages 2349-2375 Impact Factor: 9.000 Quartile: 1 Citations: 1 DOI: https://doi.org/10.1038/s44321-024-00127-w	2024
Potential diagnostic and drug target markers in glioblastoma <i>Hina Ahsan Dr Muhammad Asghar Shoukat Iqbal Malik</i> <i>Scientific Reports</i> , Vol:14, Article Number: 7292 Impact Factor: 3.8 Quartile: 1 Citations: 5	2024

DOI: 10.1038/s41598-024-57752-1

Human influenza virus infection elicits distinct patterns of monocyte and dendritic cell mobilization in blood and the nasopharynx

2023

Sindhu Vangeti Sara Falck-Jones Meng Yu1 Björn Österberg Sang Liu Muhammad Asghar Klara Sondén Clare Paterson Penn Whitley Jan Albert Niclas Johansson Anna Färnert Anna Smed-Sörensen
eLife , Volume 12, Article Number e77345

Impact Factor: 7.7 | **Quartile:** 1 | **Citations:** 17

DOI: 10.7554/eLife.77345

Mitochondrial biogenesis, telomere length and cellular senescence in Parkinson's disease and Lewy body dementia

2022

Muhammad Asghar Amani Odeh Ahmad Jouni Fattahi Alexandra Edwards Henriksson Aurelie Miglar Shervin Khosousi Per Svenningsson
Scientific Reports , Volume 12, Issue 1, Article Number 17578

Impact Factor: 4.6 | **Quartile:** 2 | **Citations:** 30

DOI: doi.org/10.1038/s41598-022-22400-z

Distinct kinetics of antibodies to 111 Plasmodium falciparum proteins identifies markers of recent malaria exposure

2022

Victor Yman James Tuju Michael T. White Gathoni Kamuyu Kennedy Mwai Nelson Kibinge Muhammad Asghar Christopher Sundling Klara Sondén Linda Murungi Daniel Kiboi Rinter Kimathi Timothy Chege Emily Chepsat Patience Kiyuka Lydia Nyamako Faith H. A. Osier Anna Farner
Nature Communications , Volume 13, Issue 1, Article Number: 331

Impact Factor: 16.6 | **Quartile:** 1 | **Citations:** 16

DOI: https://doi.org/10.1038/s41467-021-27863-8

Comparison of low-versus high-dose steroids in the clinical outcome of hospitalized covid-19 patients

2021

Zubia Jamil Fahad N. Almajhdi Samreen Khalid Muhammad Asghar Jamal Ahmed Yasir Waheed
Antibiotics , Volume 10, Issue 12, Article Number 1510

Impact Factor: 5.22 | **Quartile:** 1 | **Citations:** 10

DOI: doi.org/10.3390/antibiotics10121510

Beneficial effects of anticoagulants on the clinical outcomes of covid-19 patients

2021

Zubia Jamil Azmat Ali Khan Samreen Khalid Muhammad Asghar Khalid Muhammad Yasir Waheed
Antibiotics , Volume 10, Issue 11, Article Number 1394

Impact Factor: 5.222 | **Quartile:** 1 | **Citations:** 8

DOI: doi.org/10.3390/antibiotics10111394

Metabolic perturbation associated with COVID-19 disease severity and SARS-CoV-2 replication

2021

Shuba Krishnan Hampus Nordqvist Anoop T. Ambikan Soham Gupta Maïke Sperk Sara Svensson-Akusjärvi Flora Mikaeloff Rui Benfeitas Elisa Saccon Sivasankaran Munusamy Ponnai Jimmy Esneider Rodriguez Negin Nikouyan Amani Odeh Gustaf Ahle Muhammad Asghar Matti Sallberg Jan Vesterbacka Piotr Nowak Ákos Vegvari Anders Sönnernborg Carl Johan Treutiger Ujjwal Neogi
Molecular and Cellular Proteomics , Volume 20, Article Number 100159

Impact Factor: 7.381 | **Quartile:** 1 | **Citations:** 78

DOI: doi.org/10.1016/j.mcpro.2021.100159

Age-related mitochondrial alterations in brain and skeletal muscle of the YAC128 model of Huntington disease

2021

Kristina Bečanović Muhammad Asghar Izabella Gadawska Shiny Sachdeva David Walker Eduardo. R. Lazarowski Sonia Franciosi Kevin H. J. Park Hélène C. F. Côté Blair R. Leavitt
npj Aging and Mechanisms of Disease , Volume 7, Issue 1, Article Number 26

Impact Factor: N/A | **Citations:** 15

DOI: doi.org/10.1038/s41514-021-00079-2

Biomarkers of cellular aging during a controlled human malaria infection

2021

Aurelie Miglar Isaie J. Reuling Xi Zen Yap Anna Färnert Robert W. Sauerwein Muhammad Asghar
Scientific Reports , Volume 11, Issue 1, Article Number: 18733

Impact Factor: 4.997 | **Quartile:** 2 | **Citations:** 9

DOI: https://doi.org/10.1038/s41598-021-97985-y

Football and team handball training postpone cellular aging in women

2021

Marie Hagman Bjørn Frstrup Rémi Michelin Peter Krstrup Muhammad Asghar
Scientific Reports , Volume 11, Issue 1, Article Number 11733

Impact Factor: 4.997 | **Quartile:** 2 | **Citations:** 7

DOI: doi.org/10.1038/s41598-021-91255-7

Determinants of the varied profiles of Plasmodium falciparum infections among infants living in Kintampo, Ghana

2021

Akua Kyerewaa Botwe Felix Boakye Oppong Stephaney Gyaase Seth Owusu-Agyei Muhammad Asghar Kwaku Poku Asante Anna Färnert Faith Osier
Malaria Journal, Volume 20, Issue 1, Article Number 240

Impact Factor: 3.469 | **Quartile:** 2 | **Citations:** 3

DOI: 10.1186/s12936-021-03752-9

Hiv-exposed seronegative sex workers express low t-cell activation and an intact ectocervical tissue microenvironment

2021

Maria Röhl Annelie Tjernlund Julie Lajoie Gabriella Edfeldt Frideborg Bradley Sofia Bergström Vilde Kaldhusdal Alexandra Åhlberg Anna Manberg Kenneth Omollo Geneviève Boily-Larouche Muhammad Asghar Douglas S. Kwon Julius Oyugi Joshua Kimani Peter Nilsson Keith R. Fowke Kristina Broliden
Vaccines, Volume: 9, Issue:3, Page:1-19

Impact Factor: 4.961 | **Quartile:** 2 | **Citations:** 6

DOI: doi.org/10.3390/vaccines9030217

Memory B-Cell Responses Against Merozoite Antigens After Acute Plasmodium falciparum Malaria, Assessed Over One Year Using a Novel Multiplexed FluoroSpot Assay

2021

Peter Jahnmatz Christopher Sundling Victor Yman Linnea Widman Muhammad Asghar Klara Sonde Christine Stenström Christian Smedman Francis Ndungu Niklas Ahlborg Anna Farnert
Frontiers in Immunology, Volume 11, Article Number 619398

Impact Factor: 8.787 | **Quartile:** 1 | **Citations:** 6

DOI: doi.org/10.3389/fimmu.2020.619398

Increased circulation time of Plasmodium falciparum underlies persistent asymptomatic infection in the dry season

2020

Carolina M. Andrade Hannah Fleckenstein Richard Thomson-Luque Safiatou Doumbo Nathalia F. Lima Carrie Anderson Julia Hibbert Christine S. Hopp Tuan M. Tran Shanping Li Moussa Niangaly Hamidou Cisse Didier Doumtabe Jeff Skinner Dan Sturdevant Stacy Ricklefs Kimmo Virtaneva Manijeh Vafa Homann Louise Turner Joana Martins Erik L. Allman Marie-Esther N'Dri Marie-Esther N'Dri Volker Winkler Manuel Llinás Catherine Lavazec Muhammad Asghar

Nature Medicine, Volume:26, Issue:12, Page:1929-1940

Impact Factor: 82.9 | **Quartile:** 1 | **Citations:** 77

DOI: 10.1038/s41591-020-1084-0

Profiles of Plasmodium falciparum infections detected by microscopy through the first year of life in Kintampo a high transmission area of Ghana

2020

Akua Kyerewaa Botwe Seth Owusu-Agyei Muhammad Asghar Ulf Hammar Felix Boakye Oppong Stephaney Gyaase David Dosoo Gabriel Jakpa Ellen Boamah Mieks Frenken Twumasi Faith Osier Anna Färnert Kwaku Poku Asante
Plos One, Volume 15, Issue 10, Article Number e0246773

Impact Factor: 3.240 | **Quartile:** 2 | **Citations:** 5

DOI: doi.org/10.1371/journal.pone.0240814

Effectiveness of sulfadoxine–pyrimethamine for intermittent preventive treatment of malaria and adverse birth outcomes in pregnant women

2020

Eulambius M. Mlugu Omary Minzi Muhammad Asghar Anna Farnert Appolinary A.R. Kamuhabwa Eleni Aklilu
Pathogens, Volume:9, Issue:3, Article Number 207

Impact Factor: 3.492 | **Quartile:** 2 | **Citations:** 19

DOI: doi.org/10.3390/pathogens9030207

A panel of recombinant proteins from human-infective Plasmodium species for serological surveillance

2020

Nicole Müller-Sienerth Jarrod Shilts Khamisah Abdul Kadir Victor Yman Manijeh Vafa Homann Muhammad Asghar Billy Ngasala Balbir Singh Anna Färnert Gavin J. Wright
Malaria Journal, Volume 19, Issue 1, Article Number: 31

Impact Factor: 2.979 | **Quartile:** 1 | **Citations:** 11

DOI: doi.org/10.1186/s12936-020-3111-5

Impact of Q-Griffithsin anti-HIV microbicide gel in non-human primates: In situ analyses of epithelial and immune cell markers in rectal mucosa

2019

Gökçe Günaydın Gabriella Edfeldt David A. Garber Muhammad Asghar Laura Noël-Romas Adam Burgener Carolina Wählby Lin Wang Lisa C. Rohan Patricia Guenther James Mitchell Nobuyuki Matoba Janet M. McNicholl Kenneth E. Palmer Annelie Tjernlund Kristina Broliden
Scientific Reports, Volume 9, Issue 1, Article Number: 18120

Impact Factor: 3.998 | **Quartile:** 1 | **Citations:** 18

DOI: doi.org/10.1038/s41598-019-54493-4

- Pregnancy and CYP3A5 genotype affect day 7 plasma lumefantrine concentrations** 2019
Ritah F. Mutagonda Omary M.S. Minzi Siriel N. Massawe Muhammad Asghar Anna Farnert Appolinary A.R. Kamuhabwa Eleni Aklillu Drug Metabolism and Disposition, Volume 47, Issue 12, Pages 1415-1424
Impact Factor: 3.231 | **Quartile:** 2 | **Citations:** 15
DOI: doi.org/10.1124/dmd.119.088062
- Urothelial cell senescence is not linked with telomere shortening** 2019
Clara Ibel Chamorro Muhammad Asghar Åsa Ekblad Anna Färnert Cecilia Götherström Magdalena Fossum Journal of Tissue Engineering and Regenerative Medicine, Volume:13, Issue:9, Page:1518-1527
Impact Factor: 3.078 | **Quartile:** 2 | **Citations:** 1
DOI: doi.org/10.1002/term.2900
- Persistent transmission of plasmodium malariae and plasmodium ovale species in an area of declining plasmodium falciparum transmission in Eastern Tanzania** 2019
Victor Yman Grace Wandell Doreen D. Mutemi Aurelie Miglar Muhammad Asghar Ulf Hammar Mattias Karlsson Ingrid Lind Cleis Nordfjell Ingegerd Rooth Billy Ngasala Manijeh Vafa Homan Anna Farnert PLoS Neglected Tropical Diseases, Volume:13, Issue:5, Article Number e0007414
Impact Factor: 3.885 | **Quartile:** 1 | **Citations:** 88
DOI: doi.org/10.1371/journal.pntd.0007414
- B cell profiling in malaria reveals expansion and remodeling of CD11c+ B cell subsets** 2019
Christopher Sundling Caroline Rönnberg Victor Yman Muhammad Asghar Peter Jahnmatz Tadeppally Lakshmikanth Jaromir Mikes Mattias N. Forsell Klara Sondén Adnane Achour Petter Brodin Kristina E.M. Persson Anna Färnert JCI Insight, Volume:4, Issue:9, Article Number e126492
Impact Factor: 6.205 | **Quartile:** 1 | **Citations:** 51
DOI: doi.org/10.1172/jci.insight.126492
- Antibody responses to merozoite antigens after natural Plasmodium falciparum infection: Kinetics and longevity in absence of re-exposure** 2019
Victor Yman Michael T. White Muhammad Asghar Christopher Sundling Klara Sondén Simon J. Draper Faith H. A. Osier Anna Färnert BMC Medicine, Volume:17, Issue:1, Article Number: 22
Impact Factor: 6.782 | **Quartile:** 1 | **Citations:** 46
DOI: doi.org/10.1186/s12916-019-1255-3
- Liver Injury in Uncomplicated Malaria is an Overlooked Phenomenon: An Observational Study** 2018
Isaie J. Reuling Gerdie M. de Jong Xi Zen Yap Muhammad Asghar Jona Walk Lisanne A. van de Schans Rob Koelewijn Anna Färnert Quirijn de Mast Andre J. van der Ven Teun Bousema Jaap J. van Hellemond Perry J.J. van Genderen RobertW. Sauerwein EBioMedicine, Volume 36, Pages 131-139
Impact Factor: 6.680 | **Quartile:** 1 | **Citations:** 45
DOI: doi.org/10.1016/j.ebiom.2018.09.018
- Cellular aging dynamics after acute malaria infection: A 12-month longitudinal study** 2018
Muhammad Asghar Victor Yman Manijeh Vafa Homann Klara Sond Ulf Hammar Dennis Hasselquist Anna Farnert Aging Cell, Volume 17, Issue 1, Article Number e12702
Impact Factor: 7.346 | **Quartile:** 1 | **Citations:** 35
DOI: doi.org/10.1111/accel.12702
- Detection of Malaria Parasites After Treatment in Travelers: A 12-months Longitudinal Study and Statistical Modelling Analysis** 2017
Manijeh Vafa Homann S. Noushin Emami Victor Yman Christine Stenström Klara Sondén Hanna Ramström Mattias Karlsson Muhammad Asghar Anna Färnert EBioMedicine, Volume 25, Pages 66-72
Impact Factor: 6.183 | **Quartile:** 1 | **Citations:** 50
DOI: doi.org/10.1016/j.ebiom.2017.10.003
- Pale and dark morphs of tawny owls show different patterns of telomere dynamics in relation to disease status** 2017
Patrik Karell Staffan Bensch Kari Ahola Muhammad Asghar Proceedings of the Royal Society B: Biological Sciences, Volume 284, Issue 1859, Pages 1-8
Impact Factor: 4.847 | **Quartile:** 1 | **Citations:** 43
DOI: doi.org/10.1098/rspb.2017.1127
- Effect of pharmacogenetics on plasma lumefantrine pharmacokinetics and malaria treatment outcome in pregnant women** 2017
Ritah F. Mutagonda Appolinary A. R. Kamuhabwa Omary M. S. Minzi Siriel N. Massawe Muhammad Asghar Manijeh V. Homann Anna Färnert Eleni Aklillu

High Rate of Treatment Failures in Nonimmune Travelers Treated With Artemether-Lumefantrine for Uncomplicated Plasmodium falciparum Malaria in Sweden: Retrospective Comparative Analysis of Effectiveness and Case Series

2017

Klara Sonden Katja Wyss Irina Jovel Antero Vieira da Silva Anton Pohanka Muhammad Asghar Manijeh Vafa Homann Lars L. Gustafsson Urban Hellgren Anna Färnert

Clinical Infectious Diseases, Volume 64, Issue 2, Pages 199-206

Impact Factor: 9.117 | Quartile: 1 | Citations: 47

DOI: doi.org/10.1093/cid/ciw710

Parallel telomere shortening in multiple body tissues owing to malaria infection

2016

Muhammad Asghar Vaidas Palinauskas Nade`ge Zaghdoudi-Allan Gediminas Valkiu`nas Andrey Mukhin Elena Platonova Anna Farnert Staffan Bensch Dennis Hasselquist

Proceedings of the Royal Society B: Biological Sciences, Volume 283, Issue 1836, Pages 1-7

Impact Factor: 4.940 | Quartile: 1 | Citations: 62

DOI: doi.org/10.1098/rspb.2016.1184

A rare study from the wintering grounds provides insight into the costs of malaria infection for migratory birds

2016

Marjorie C. Sorensen Muhammad Asghar Staffan Bensch Graham D. Fairhurst Susanne Jenni-Eiermann Claire N. Spottiswoode

Journal of Avian Biology, Volume 47, Issue4, Pages 575-582

Impact Factor: 2.228 | Quartile: 1 | Citations: 22

DOI: doi.org/10.1111/jav.00870

Skin pentosidine and telomere length do not covary with age in a long-lived seabird

2015

Kalev Rattiste Hillar Klandorf Janek Urvik Tuul Sepp Muhammad Asghar Dennis Hasselquist Crissa Cooley Peeter Ho`rak

Biogerontology, Volume 16, Issue 4, Pages 435-441

Impact Factor: 3.252 | Quartile: 2 | Citations: 21

DOI: doi.org/10.1007/s10522-015-9564-1

Hidden costs of infection: Chronic malaria accelerates telomere degradation and senescence in wild birds

2015

Muhammad Asghar D. Hasselquist B. Hansson P. Zehindjiev H. Westerdahl S. Bensch

Science, Volume 347, Issue 6220, Pages 436-438

Impact Factor: 34.661 | Quartile: 1 | Citations: 403

DOI: doi.org/10.1126/science.1261121

Maternal and genetic factors determine early life telomere length

2015

Muhammad Asghar Staffan Bensch Maja Tarka Bengt Hansson Dennis Hasselquist

Proceedings of the Royal Society B: Biological Sciences, Volume 282, Issue 1799, Pages 1-9

Impact Factor: 4.823 | Quartile: 1 | Citations: 105

DOI: doi.org/10.1098/rspb.2014.2263

Co-infections by malaria parasites decrease feather growth but not feather quality in house martin

2013

Alfonso Marzal Muhammad Asghar Laura Rodríguez Maribel Reviriego Ignacio G. Hermosell Javier Balbontín Luz Garcia-Longoria Florentino de Lope Staffan Bensch

Journal of Avian Biology, Volume 44, Issue 5, Pages 437-444

Impact Factor: 2.235 | Quartile: 1 | Citations: 42

DOI: doi.org/10.1111/j.1600-048X.2013.00178.x

Primary peak and chronic malaria infection levels are correlated in experimentally infected great reed warblers

2012

Helena Westerdah Muhammad Asghar Pavel Zehindjiev Mihaela Ilieva Dennis Hasselquist Staffan Bensch

Parasitology, Volume 139, Issue 10, Pages 1246-1252

Impact Factor: 2.355 | Quartile: 2 | Citations: 42

DOI: doi.org/10.1017/S0031182012000510

A new morphologically distinct avian malaria parasite that fails detection by established polymerase chain reactionbased protocols for amplification of the cytochrome B gene

2012

Pavel Zehindjiev Asta Kriz`anauskiene Staffan Bensch Vaidas Palinauskas Muhammad Asghar Dimitar Dimitrov Sergio Scebba Gediminas Valkiunas

Journal of Parasitology, Volume 98, Issue 3, Pages 657-665

Impact Factor: 1.321 | Quartile: 3 | Citations: 64

DOI: doi.org/10.1645/GE-3006.1

Quantitative disease resistance: To better understand parasite-mediated selection on major histocompatibility complex

2012

Helena Westerdahl Muhammad Asghar Dennis Hasselquist Staffan Bensch

Proceedings of the Royal Society B: Biological Sciences, Volume 279, Issue 1728, Pages 577-584

Impact Factor: 5.683 | **Quartile:** 1 | **Citations:** 73

DOI: doi.org/10.1098/rspb.2011.0917

Are chronic avian haemosporidian infections costly in wild birds?

2011

Muhammad Asghar Dennis Hasselquist Staffan Bensch

Journal of Avian Biology, Volume 42, Issue 6, Pages 530-537

Impact Factor: 2.280 | **Quartile:** 1 | **Citations:** 174

DOI: doi.org/10.1111/j.1600-048X.2011.05281.x