

SECTION EDITORS

EDITORIAL BOARD

SPECIAL ISSUE

A NEW AGE FOR GENETICS AND GENOMICS
RESEARCH IN AFRICA

Guest Editors

EMMANUEL PEPRAH, KEN WILEY, and UCHECHUKWU SAMPSON

- 67 EDITOR'S PAGE** A New Age for African-Driven Genomics Research: Human Heredity and Health in Africa (H3Africa)
Emmanuel Peprah, Ken Wiley, Uchechukwu Sampson, and Jagat Narula
- 69 EDITORIAL COMMENT** Sex, Ethnicity, and CVD Among Women of African Descent: An Approach for the New Era of Genomic Research
Whitney L. Barfield and Cheryl Anne Boyce
- 73 EDITORIAL COMMENT** Understanding the Evolutionary Biology of CVD From Analysis of Ancestral Population Genomes
Muntaser Ibrahim, Maha Osman, and Emmanuel Peprah
- 77 BRIEF REPORT** Neurological Complications in Subjects With Sickle Cell Disease or Trait: Genetic Results From Mali
Guida Landouré, Lassana Cissé, Boubacar A. Touré, Abdoulaye Yalcouyé, Toumany Coulibaly, Mamadou Karambè, Adama S. Sissoko, Thomas Coulibaly, Ambroise Wonkam, and Cheick O. Guinto, The H3Africa Consortium
- 81 ORIGINAL RESEARCH** Regional and Sex Differences in the Prevalence and Awareness of Hypertension: An H3Africa AWI-Gen Study Across 6 Sites in Sub-Saharan Africa
F. Xavier Gómez-Olivé, Stuart A. Ali, Felix Made, Catherine Kyobutungi, Engelbert Nonterah, Lisa Micklesfield, Marianne Alberts, Romuald Boua, Scott Hazelhurst, Cornelius Debbuur, Felistas Mashinya, Sekgothe Dikotope, Hermann Sorgho, Ian Cook, Stella Muthuri, Cassandra Soo, Freedom Mukomana, Godfred Agongo, Christopher Wandabwa, Sulaimon Afolabi, Abraham Oduro, Halidou Tinto, Ryan G. Wagner, Tilahun Haregu, Alisha Wade, Kathleen Kahn, Shane A. Norris, Nigel J. Crowther, Stephen Tollman, Osman Sankoh, and Michèle Ramsay, as members of AWI-Gen and the H3Africa Consortium
- 91 ORIGINAL RESEARCH** Development of Bioinformatics Infrastructure for Genomics Research
Nicola J. Mulder, Ezekiel Adebisi, Marion Adebisi, Seun Adeyemi, Azza Ahmed, Rehab Ahmed, Bola Akanle, Mohamed Alibi, Don L. Armstrong, Shaun Aron, Efejiro Ashano, Shakuntala Baichoo, Alia Benkahla, David K. Brown, Emile R. Chimusa, Faisal M. Fadlilmola, Dare Falola, Segun Fatumo, Kais Ghedira, Amel Ghouila, Scott Hazelhurst, Itunuoluwa Isewon, Segun Jung, Samar Kamal Kassim, Jonathan K. Kayondo, Mamana Mbiyavanga, Ayton Meintjes, Somia Mohammed, Abayomi Mosaku, Ahmed Moussa, Mustafa Muhammad, Zahra Mungloo-Dilmohamud, Oyekanmi Nashiru, Trust Odia, Adaobi Okafor, Olaleye Oladipo, Victor Osamor, Jellili Oyelade, Khalid Sadki, Samson Pandam Salifu, Jumoke Soyemi, Sumir Panji, Fouzia Radouani, Oussama Souiai, and Özlem Tastan Bishop, and The H3ABioNet Consortium, as members of the H3Africa Consortium

Continued on next page

- 99 ORIGINAL RESEARCH** Prevalence and Prognostic Features of ECG Abnormalities in Acute Stroke: Findings From the SIREN Study Among Africans
Abiodun M. Adeoye, Okechukwu S. Ogah, Bruce Ovbiagele, Rufus Akinyemi, Vincent Shidali, Francis Agyekum, Akinyemi Aje, Oladimeji Adebayo, Joshua O. Akinyemi, Philip Kolo, Lambert Tetteh Appiah, Henry Iheonye, Uwanuruochi Kelechukwu, Amusa Ganiyu, Taiwo O. Olunuga, Onoja Akpa, Ojo Olakanmi Olagoke, Fred Stephen Sarfo, Kolawole Wahab, Samuel Olowookere, Adekunle Fakunle, Albert Akpalu, Philip B. Adebayo, Kwadwo Nkromah, Joseph Yaria, Philip Ibinaiye, Godwin Ogbole, Aridegbe Olumayowa, Sulaiman Lakoh, Benedict Calys-Tagoe, Paul Olowoyo, Chukwuonye Innocent, Hemant K. Tiwari, Donna Arnett, Osaigbovo Godwin, Bisi Ayotunde, Josephine Akpalu, Okeke Obiora, Odo Joseph, Adeleye Omisore, Carolyn Jenkins, Daniel Lackland, Lukman Owolabi, Suleiman Isah, Abdu H. Dambatta, Morenikeji Komolafe, Andrew Bock-Oruma, Ezinne Sylvia Melikam, Lucius Chidiebere Imoh, Taofiki Sunmonu, Mulugeta Gebregziabher, Oluyemisi Olabisi, Kevin Armstrong, Ugochukwu U. Onyeonoro, Emmanuel Sanya, Atinuke M. Agunloye, Luqman Ogunjimi, Oyedunni Arulogun, Temitope H. Farombi, Olugbo Obiabo, Reginald Obiako, and Mayowa Owolabi, on behalf of the SIREN Team as part of the H3Africa Consortium
- 107 ORIGINAL RESEARCH** Exploring Overlaps Between the Genomic and Environmental Determinants of LVH and Stroke: A Multicenter Study in West Africa
Abiodun M. Adeoye, Bruce Ovbiagele, Philip Kolo, Lambert Appiah, Akinyemi Aje, Oladimeji Adebayo, Fred Sarfo, Joshua Akinyemi, Gregory Adekunle, Francis Agyekum, Vincent Shidali, Okechukwu Ogah, Dan Lackland, Mulugeta Gebregziabher, Donna Arnett, Hemant K. Tiwari, Rufus Akinyemi, Ojo Olakanmi Olagoke, Ayodipupo Sikiru Oguntade, Taiwo Olunuga, Kelechi Uwanruochi, Carolyn Jenkins, Patrick Adadey, Henry Iheonye, Lukman Owolabi, Reginald Obiako, Samuel Akinjopo, Kevin Armstrong, Albert Akpalu, Adekunle Fakunle, Raelle Saulson, Mayowa Aridegbe, Paul Olowoyo, Godwin Osaigbovo, Josephine Akpalu, Bimbo Fawale, Philip Adebayo, Oyedunni Arulogun, Philip Ibinaiye, Atinuke Agunloye, Naser Ishaq, Kolawole Wahab, Onoja Akpa, Omisore Adeleye, Andrew Bock-Oruma, Godwin Ogbole, Sylvia Melikam, Joseph Yaria, Luqman Ogunjimi, Abdul Salaam, Taofiki Sunmonu, Akintomiwa Makanjuola, Temitope Farombi, Ruth Laryea, Ezinne Uvere, Salaam Kehinde, Innocent Chukwuonye, Paschal Azuh, Morenikeji Komolafe, Adeseye Akintunde, Olugbo Obiabo, Olusegun Areo, Issa Kehinde, Adeniyi G. Amusa, and Mayowa Owolabi, on behalf of SIREN Team as part of H3Africa Consortium
- 115 ORIGINAL RESEARCH** The 22q11.2 Deletion Syndrome in Congenital Heart Defects: Prevalence of Microdeletion Syndrome in Cameroon
Ambroise Wonkam, Ricardo Toko, David Chelo, Cedrik Tekendo-Ngangang, Samuel Kingue, and Sophie Dahoun
- 121 ORIGINAL RESEARCH** Structure-Based Analysis of Single Nucleotide Variants in the Renin-Angiotensinogen Complex
David K. Brown, Olivier Sheik Amamuddy, and Özlem Tastan Bishop

Continued on next page

- 133 REVIEW** Genetic Effects on the Correlation Structure of CVD Risk Factors: Exome-Wide Data From a Ghanaian Population
Nuri Kodaman, Rafal S. Sobota, Folkert W. Asselbergs, Matthew T. Oetjens, Jason H. Moore, Nancy J. Brown, Melinda C. Aldrich, and Scott M. Williams
- 141 REVIEW** Interethnic Differences in Serum Lipids and Implications for Cardiometabolic Disease Risk in African Ancestry Populations
Amy R. Bentley and Charles N. Rotimi
- 151 REVIEW** Role of Structural Bioinformatics in Drug Discovery by Computational SNP Analysis: Analyzing Variation at the Protein Level
David K. Brown and Özlem Tastan Bishop
- 163 REVIEW** The Importance of Conducting Stroke Genomics Research in African Ancestry Populations
Huichun Xu, Braxton D. Mitchell, Emmanuel Pehrah, Steven J. Kittner, and John W. Cole
- 169 REVIEW** Examining How Our Shared Evolutionary History Shapes Future Disease Outcomes
Fasil Tekola-Ayele and Emmanuel Pehrah
- 173 PERSPECTIVES FROM NHLBI** Geography of Genetics and Genomics Research Funding in Africa
Eric Coles and George A. Mensah