**CURRICULUM VITAE**

**PERSONAL DETAILS**

**FULL NAME:** Kweku Bedu-Addo

**DATE AND PLACE OF BIRTH:** 22nd November 1961, Tema

Greater Accra Region, Ghana

**NATIONALITY:** Ghanaian

**MARITAL STATUS:** Married

**WIFE:** Linda Asare-Adjebeng Bedu-Addo

**CHILDREN** 3 Girls

**Tel. Nos.** 0242631589/0205342348/0322064175

**ADDRESS:** Department of Physiology,

School of Medicine and Dentistry,

College of Health Sciences,

Kwame Nkrumah University of Science and Technology (KNUST),

Kumasi,

Ghana, West Africa

**Email Address** [kbeduaddo.sms@knust.edu.gh](mailto:kbeduaddo.sms@knust.edu.gh)

kwekuba@yahoo.com

**ACADEMIC DEGREES**

* PhD (Biological Sciences), 2006
* MPhil. (Biological Sciences), 1993
* B.Sc. (Biological Sciences), 2nd Class Honours (Lower Division), 1987

**MEMBERSHIP OF PROFESSIONAL BODIES**

* Member, Ghana Science Association (GSA).
* Member, Ghana Institute of Biology, M. I. Biol. (Ghana).

**UNIVERSITIES ATTENDED WITH DATES**

* The University of Birmingham, Birmingham, UK, 2001-2006
* Kwame University of Science & Technology (KNUST), Kumasi, Ghana, 1990-1992
* Kwame University of Science & Technology (KNUST), Kumasi, Ghana, 1982 -1987

**SCHOOLS ATTENDED/CERTIFICATES**

* Swedru Secondary School, Agona Swedru, Ghana (1979-1981): G.C.E. A-Level Certificate
* Swedru Secondary School, Agona Swedru, Ghana (1974-1979): G.C.E. O - Level Certificate (Division 1)

**UNIVERSITY TEACHING AND RESEARCH EXPERIENCE WITH DATES**

**Appointments**

* August 2018- date, Head- Department of Physiology
* August 2017- July 2018, Head- Department of Sonography
* January 2015-July 2017, Head- Department of Physiology
* August 2014-January 2015, Head- Department of Sonography
* August 2012-July 2014, Coordinator-Sonography Programme
* October, 2007-present, Senior Lecturer, Department of Physiology, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
* 2006-2007, Lecturer, Department of Physiology, SMS, KNUST
* September, 2002- May, 2005, Demonstrator at School of Biosciences, The University of Birmingham
* 1st October, 1993-September, 2001, Lecturer at the Department of Physiology, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, W/A
* October, 1989-December, 1989, Demonstrator/Research Assistant at the Department of Biological Sciences Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, W/A
* November, 1987-October, 1989, National Service Person, Department of Biological Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, W/A

**Academic Ranks/Courses taught**

* 2007 – date Senior Lecturer
* 1993 - 2007: Lecturer

**Personal Theses**

* Bedu-Addo, K. (2006). Calcium signalling in human spermatozoa. PhD Thesis. University of Birmingham, Birmingham, UK.
* Bedu-Addo, K. (1993) Effects of the crude extract of *Rauwolfia vomitoria* on the Reproductive process of the albino rat (*Rattus norvergicus*). M. Phil. Thesis, KNUST, Kumasi.
* Bedu-Addo, K. (1987).Investigations into the haemopoeitic properties of *Ipomoea involucrata* and any possible adverse effects including teratogenicity in albino rat (*Rattus norvergicus*). BSc. Thesis, KNUST, Kumasi.

**Research Experience**

Although I started my research career in reproductive physiology, and still continue to research in the field, I have recently been involved in the Modeling the Epidemiologic Transition Study (METS) since May 2017. I joined the study as a co-investigator for the METS microbiome/sleep studies at our Ghanaian site.

I have been involved in the researching on the effects of chemicals, drugs, and the environment on the reproductive processes in humans and animals.

**PUBLICATIONS**

* Mehta, S., Dugas, L.R., Choo-Kang, C., Bovet, P., Forrester, T., **Bedu-Addo, K.**, Lambert, E.V., Plange-Rhule, J., Riesen, W., Korte, W. (2021). Consumption of Monounsaturated Fatty Acids Is Associated with Improved Cardiometabolic Outcomes in Four African-Origin Populations Spanning the Epidemiologic Transition. *Nutrients* **2021**, *13*, 2442. <https://doi.org/10.3390/nu13072442>
* Ameh-Mensah, C, Duduyemi, BM**, Bedu-Addo,** K, Atta Manu E, Opoku, F, and Titiloye, N, (2021). The Analysis of bcl-2 in Association with p53 and Ki-67 in Triple Negative Breast Cancer and Other Molecular Subtypes in Ghana. Journal of Oncology, Volume 2021 <https://doi.org/10.1155/2021/7054134>
* Titiloye, NA, **Bedu-Addo, K**, Atta Manu, E, Ameh-Mensah, C, Opoku F, Duduyemi, BM, (2021). Breast lesions and cancer: histopathology and molecular classification in a referral hospital in Ghana (2021). Alexandria Journal of Medicine, VOL. 57, NO. 1, 130–136

<https://doi.org/10.1016/j.xcrm.2021.100203>

* Speakman, JR, Yamada, Y, Sagayama, H., Berman, ESF, Ainslie, PN, Andersen, LF, Anderson, JA, Arab, L, Baddou, I, **Bedu-Addo, K**, *et al*., (2021). A standard calculation methodology for human doubly labeled water studies. Cell Reports Medicine2, <https://doi.org/10.1016/j.xcrm.2021.100203>
* Awuah, S. P., Okai, I., Ntim, E. A., **Bedu- Addo, K.,** (2020)**.** Prevalence, placenta development, and perinatal outcomes of women with hypertensive disorders of pregnancy at Komfo Anokye Teaching Hospital. PLOS ONE <https://doi.org/10.1371/journal.pone.0233817>
* Attah Manu, E., **Bedu-Addo, K**., Titiloye, N. A., Ameh-Mensah, C., Opoku, F., Duduyemi, M. B., (2020). Expression of Tumour-Associated MUC1 Is a Poor Prognostic Marker in Breast Cancer in Kumasi, Ghana. <http://dx.doi.org/10.1155/2020/9752952>
* **Bedu-Addo, K**., Ephraim, R. K. D., Tanoe-Blay, C., Ahenkorah-Fondjo, L., Osei-Darkwah, K., Mabel Ephraim, M., Kontoh, K. A., and Albert Abaka-Yawson, A., (2020). Prevalence and associated factors of fetal macrosomia in a rural community in Ghana. Cogent Medicine (2020), 7: 1746602 <https://doi.org/10.1080/2331205X>.
* Fei, N, Bernabé, B. P., Lie, L. Baghdan, D., **Bedu-Addo, K**., Jacob Plange-Rhule, R., Terrence E. Forrester, T.E., Estelle V. Lambert, E. V., Bovet, P., Gottel, N., Riesen, W., Korte, W., Luke A., Kliethermes, S. A., Layden, B. T., Jack A. Gilbert, J. A., Dugas, L. R., (2019). The human microbiota is associated with cardiometabolic risk across the epidemiologic transition. PLOS ONE | https://doi.org/10.1371/journal.pone.0215262
* Agyepong**,** E., **Bedu-Addo, K.** (2019). Semen parameters and the incidence and effects of bacteriospermia in male partners of infertile couples attending a fertility clinic in the Kumasi Metropolis, Ghana. *Int J Reprod Contracept Obstet Gynecol. 8(1):99-107*
* Dugas, LR, Lie, L, Plange-Rhule, J, **Bedu-Addo, K**, Bovet, P, Lambert, EV, Forrester, T, Luke, A, Gilbert, TA, and Layden, BT, (2018). Gut microbiota, short chain fatty acids, and obesity across the epidemiologic transition: The METS-Microbiome study protocol. BMC Public Health (2018)
* Antwi, JS, **Bedu-Addo, K**, Ankobea-Krokoe, F, (2018). "Patterns of lipids and estrogen in women visiting the fertility clinic of Komfo Anokye Teaching Hospital, Kumasi, Ghana". *Int J Reprod Contracept Obstet Gynecol.* *7(6):2081-2088*
* Ephraim, M, **Bedu-Addo, K**, Turpin, CA, Ephraim, RKD and Anto, EO, (2018). Diagnostic Accuracy of Urine Microalbumin and Serum Uric Acid: A Case-control Study of Patients with Preeclampsia in the Komfo Anokye Teaching Hospital, Kumasi, Ghana**.** Annals of Medical and Health Sciences Research 8(2): 77-83
* Mensah, OA, **Bedu-Addo, K**., Odoi, AT, Adoba, P and Richard K. D. Ephraim, RKD, (2018) **Hematological Profile in Pregnancy and Its Effect on Birth Outcomes; a Longitudinal Study of the Komfo Anokye Teaching Hospital, Kumasi.** AJMAH, 11(3): 1-9
* Afriyie, J., **Bedu-Addo, K**., Asiamah, E. A., Twum Boateng, S., (2016) **Low Birth weights among adolescents at Cape-Coast Metropolitan Hospital in Ghana. I**[nt J Reprod Contracept Obstet Gynecol](http://www.scopemed.org/?jid=89). 2016; 5(12): 4242-4247
* **Opoku, A., Ankobea-Krokoe, F., Bedu-Addo, K., (2016).** Effect of Environmental Factors, Lifestyle, Lipid Profile and Previous Medical Conditions on Semen Quality in Male Partners of Infertile Couples; Evidence from Kumasi Metropolis. *British Journal of Medicine & Medical Research 16(10): 1-10*
* **Ngala, R. A., Yakass, M. B., Bedu-Addo, K., Hiadzi, E. K., (2015). Effects of basal gonadotropins, prolactin, and anthropometry as predictive markers of ovarian response in patients seeking assisted reproduction. *Trends in Med. Res* 10 (4): 75-86**
* **Opoku, A., Boateng, D., Quansah, D. Y., Bedu-Addo, K., Ankobea-Krokoe, F., (2014). Semen Characteristics of Male Infertile Couples in the Kumasi Metropolis: A Study of Primary and Secondary Infertile Couples.** *British Journal of Medicine & Medical Research* **4(6)**: 1432-1441, 2014
* Ntim, E. A., **Bedu-Addo, K**., (2013). Effect of HIV-1 and Antiretroviral Therapy on Semen Quality. *Journl Gh. Sci Ass.* **15(1):** 30 – 41
* **Bedu-Addo, K**, Publicover, S. (2010). Potassium ions improve the Progesterone­-induced [Ca2+]i increase in Human Spermatozoa. *Journl Gh. Sci Ass.* **12(1):** 166 – 177
* **Bedu-Addo, K**, Publicover, S. (2008). Characterization of the Ca2+ Channels Involved in the Progesterone-Induced Ca2+ Influx and Acrosome Reaction (AR) in Human Spermatozoa. *Journl Gh. Sci Ass.* **10(2):** 166 – 177
* **Bedu-Addo, K**, Costello, S, Harper, C, Machado-Oliveira, G, Lefievre, L, Ford, C, Barratt, C, Publicover, S. (2008). Mobilisation of stored calcium in the neck region of human sperm – a mechanism for regulation of flagellar activity. *Int. J. Dev. Biol*. **52**: 615-626
* Lefièvre L,[**Bedu-Addo K**](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Bedu-Addo%20K%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Conner SJ](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Conner%20SJ%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Machado-Oliveira GS](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Machado-Oliveira%20GS%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Chen Y](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Chen%20Y%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus),Kirkman-Brown JC , [Afnan MA](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Afnan%20MA%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Publicover SJ](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Publicover%20SJ%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Ford WC](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Ford%20WC%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Barratt CL](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Barratt%20CL%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), (2007). Counting sperm does not add up any more: time for a new equation? *Reprod.* **133(4):**675-684
* **Bedu-Addo K**, [Barratt CL](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Barratt%20CL%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), Kirkman-Brown JC, [Publicover SJ](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Publicover%20SJ%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), (2007). Patterns of [Ca2+]i mobilization and cell response in human spermatozoa exposed to progesterone. [*Dev Biol.*](javascript:AL_get(this,%20'jour',%20'Dev%20Biol.');) **302(1):**324-32.
* **Bedu-Addo K**, [Lefièvre L](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Lefi%C3%A8vre%20L%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Moseley FL](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Moseley%20FL%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Barratt CL](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Barratt%20CL%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), [Publicover SJ](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Publicover%20SJ%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstractPlus), (2005). Bicarbonate and bovine serum albumin reversibly 'switch' capacitation-induced events in human spermatozoa. [*Mol Hum Reprod.*](javascript:AL_get(this,%20'jour',%20'Mol%20Hum%20Reprod.');) **11(9):**683-91.
* **Bedu-Addo, K**., Kirkman-Brown, J.C., Publicover S.J., (2004). Acquisition of the progesterone induced [Ca2+]i signal in capacitating human spermatozoa. *J Physiol* **555P, PC125**