

Resume

Name: Dr Bhaskar Borgohain
Father's Name: Jibon Ch Borgohain
Current Designation: Professor & HoD
Current Affiliation: Department of Orthopaedics and Trauma
NEIGRIHMS Shillong. www.neigrihms.gov.in



Address and Contact details

A-21, NEIGRIHMS Campus, Shillong-793018
Email: bhaskarneigrihms@gmail.com
Mobile: 9436706397 / 8837275614 (WhatsApp)

Educational Qualification:

MBBS (Assam Medical College)
MS (Delhi University)
DNB (National Academy of Medical Sciences)

International Fellowships

AO Trauma Fellow (Germany)
Trauma Disaster Management Fellow (Israel)

National Fellowship

J & J Fellowship (Joint Replacement)

Academic Appointments

2002-2005: Academic Senior Resident: Dr. Ram Manohar Lohia Hospital, New Delhi
2005-2006: Jr. Consultant, JCI -Accredited Indraprastha Apollo Hospital, New Delhi
2006-2013: Asst. Professor i/c HoD, Department of Orthopaedics at NEIGRIHMS
2013-2019: Associate Professor i/c HoD, Orthopaedics NEIGRIHMS, Shillong
2019-till date: Professor and HoD, Department of Orthopaedics at NEIGRIHMS, Shillong

Teaching Experience (as on 01-09-2022)

Postgraduate period in M.S. Orthopaedics: 03 years
Senior Residency in Orthopedics: 03 years
Assistant Professor, Shillong: 06 years 02 months 10 days
Associate professor, Shillong: 06 years 27 days
Professor and HoD, Shillong: 03 year 04 months 15 days

Total Teaching experience = 21 years 10 months and 2 Days

Scholarly affiliations

1. Editorial Board Member, Indian Journal of Orthopaedics, Indian Orthopaedic Association
2. Editorial Board Member, Journal of Clinical Orthopaedics & Traumatology (Pubmed), Delhi Orthopaedic Association
3. Thesis examiner, MCh Orthopaedics, Edinburgh University (UK)
4. External Examiner: MD Sports Medicine GGS IP University, Delhi
5. External Examiner, MS Orthopaedic Surgery, Patna Medical College

6. Thesis examiner, MS Orthopaedics, Manipur University
7. Thesis examiner, MS Orthopaedics, S. S. University of Health Sciences, Assam
8. National Faculty, AO trauma Courses, India for the years 2013, 2015, 2018, 2021, 2022
9. National Faculty, Biomaterials Courses, Coimbatore Institute of Technology, Tamil Nadu
10. National Faculty, QIP Biomaterials Courses, Indian Institute of Technology, Guwahati
11. Member, Board of Studies: NEHU Shillong
12. Member, School of Technology, NEHU Shillong

Research work and Journal Publications

Published over 70 research papers on Advanced Biomaterials, Trauma (including sports injuries) and diseases of musculoskeletal system in reputed International, National journals and peer reviewed publications. Collaborative Research work with Harvard Medical School, University of Colorado, IIT Guwahati and NIT Patna. PhD Thesis work on fat embolism syndrome. Thesis guidance to several MD Students of Radiology, Microbiology and Gynecology having multidisciplinary research thesis. Currently Editorial Board member of four reputed Journals of Orthopaedics.

List of Important Publications

1. Nag P, **Borgohain B**, Ahmed KA, Phukan P, Kumar N, Borjali A, Varadarajan KM, Chanda S. The Influence of Static Load and Sideways Impact Fall on Extramedullary Bone Plates Used to Treat Intertrochanteric Femoral Fracture: A Preclinical Strength Assessment. *Ann Biomed Eng.* 2022 Jul 12 PMID: 35821164
2. Nag P., **Borgohain B.**, Chanda S. (2021). Novel Design of Minimal Incision Double Oblique Device for Osteosynthesis (DODO) of Hip: Results of an In-silico Study Based on the Femur Morphometrics of the North-East (NE) Indian population. *Indian Journal of Orthopaedics* **55**, 385–94 PMID: 34306552
3. Khonglah TG, **Borgohain B**, Khongwir W, Ahmed KA (2021). Clinical outcome and cost analysis of negative pressure wound therapy in extremity wounds: a comparison to conventional wound management. *Int J Res Orthop.* **7**: 97-102
4. Arun S, Marbaniang B, **Borgohain B**, Kanagaraj S. Rehabilitation evaluation of the newly developed polymeric based passive polycentric knee joint. *Disability and Rehabilitation: Assistive Technology.* 2019 Jun 5:1-7
5. Davis, R., Singh, A., Debnath, K., Sabino, R. M., Popat, K., Soares, P., Keshri, A. K., and **Borgohain B.** (2021). Enhanced Micro-Electric Discharge Machining-Induced Surface Modification on Biomedical Ti-6Al-4V Alloy. *ASME. J. Manuf. Sci. Eng.;* **144**(7): 071002
6. da Silva L R R, Sales W F, Campos F D A, de Sousa J A G, Davis R, Singh A, Coelho R T, **Borgohain B** (2021). A comprehensive review on additive manufacturing of medical devices. *Progress in Additive Manufacturing* 2021; **3** DOI:10.1007/s40964-021-00188-0
7. Sharma D, **Borgohain B**, Saikia B (2021). Mucormycosis and diabetes: Lessons from the COVID pandemic. *Assam J Intern Med* 2021; **11**:60-1
8. **Borgohain B**, Tariang C, J P Darjee, et al. A Report on injuries and illnesses among Athletes and Games Officials during XII South Asian Games (SAG-2016), Shillong, India. Submitted to *Int J Res Orthop.* 2017; Vol 3 (5) :1-7
9. V. Singh, A.C.Phukan, **Borgohain B.** Importance of Ultrasonographic guided aspirated sample in early diagnosis of Musculoskeletal tuberculosis among the patients attending tertiary health care centre. *British Journal of Medical and Health Research.* 2018; **5**(5)

10. T. Khonglah, **Borgohain B**, Khongwir W, Kashif Ahmed. Extremity chronic osteomyelitis in a population of North East India: epidemiology, clinical characteristics and management. *International Journal of Research in Orthopaedics*. Int J Res Orthop. 2020 Jul;6(4):754-9
11. B. Saikia, Samarjit Dey, **Borgohain B** et al. Medical Research in India - Comprehending Challenges and Quest for Renaissance. *Annals of International Medical and Dental Research*. 2017; 3 (6): 3-7
12. **Borgohain B**, T. Khonglah: Developing and organizing a trauma system and mass casualty management: Some useful observations from the Israeli trauma model. *Ann Med Health Sci Res*. 2013; 3(1): 85–9
13. **Borgohain B**, Kumar B, S. Balasubramanian et al. Risks of concomitant trauma to the knee in lower limb long bone shaft fractures: A retrospective analysis from a prospective study population. *Adv Biomed Res*. 2013; 3:49
14. **Borgohain B**. Ethical issues in Orthopaedic Surgery: A perspective. *Global Bioethics Enquiry* (Scholarly publication of UNESCO Chair of Bioethics: 2018; Special supplementary issue :S-33
15. Khongwir WK, Khonglah TG, **Borgohain B**, Ahmed K. Traumatic anterior hip dislocation in 4- year-old child with polytrauma and flail chest. *Journal of Orthopedics, Traumatology and Rehabilitation*. 2018 Jan 1;10(1):83
16. T. Khonglah, **Borgohain B**, Wanlam K. Khongwir, Kashif A Ahmed. Salvage of segmental defect of tibia using the Huntington’s procedure: A case report. *National Journal of Clinical Orthopaedics*. 2018; 2(3):87-9
17. Ahmed KA, Khonglah T, **Borgohain B**, Khongwir W, Magu D. An Uncommon Presentation of Chronic Osteomyelitis of the Fibula in an 11-Year-Old Child: A Case Report. *Journal of Diagnostic and Clinical Research*. 2019 June; 13(6): RD01-RD03
18. **Borgohain B**, Kashif A, Khonglah T. Endoscopy assisted extended curettage in a rare case of aneurysmal bone cyst involving the 2nd metatarsal of a child. *Int J Res Orthop*. 2020 May;6(3):638-42
19. **Borgohain B**, Kashif Akhtar Ahmed, Tashi Galen Khonglah, Wanlam K. Khongwir. A case report on survival of a polytrauma patient with Fat Embolism Syndrome treated by principles of damage control orthopaedics and intensive care, *Indian Journal of Applied Research*. 2020 April; 10(4):1-2
20. T. Khonglah, **Borgohain B**, Kashif Ahmd. Arthroscopic assisted evacuation of a rare Brodie’s abscess in the femoral head of an adolescent girl – A case report. *Indian Journal of Orthopaedics Surgery*. April 2020; 6(1):50-3
21. T. Khonglah, Kashif A. Ahmed, **Borgohain B**. A rare case report of bilateral distal radius fractures including bilateral isolated metacarpophalangeal joint dislocations in a piano artist. *International Journal of Orthopaedics Sciences* 2020; 6(2): 104-6
22. **Borgohain B**, T.Khonglah, J. Bareh: Tuberculous dactylitis (spina ventosa) with concomitant ipsilateral axillary scrofuloderma in an immunocompetent child: A rare presentation of skeletal tuberculosis. *Adv Biomed Res*. 2013, 2:29
23. **Borgohain B**: Commentry: Role of MRI in spinal tuberculosis. *J Neurosc. Rur Prac*. 2013; 4:128-31
24. **Borgohain B**, N. Borgohain, T. Khonglah et al. Occult renal cell carcinoma with acrometastasis and ipsilateral juxta-articular knee lesions mimicking acute inflammation: A case report. *Adv Biomed Res*. 2012, 1:48
25. **Borgohain B**, N. Borgohain, T. Khonglah et al. Complete incorporation of long diaphyseal sequestrum without surgical intervention in chronic haematogenous osteomyelitis of tibia in an immunocompetent child: a case report. *Adv Biomed Res*. 2012. 1(4) 49-51

26. **Borgohain B**, N. Borgohain, A. Handique et al. Case report and brief review of literature on sonographic detection of accidentally implanted wooden foreign body causing persistent sinus. *Crit Ultrasound J* 2012, 4:10
26. **Borgohain B**: Prompt restoration of airway along with rapid neurological recovery following ultrasound guided needle aspiration of tubercular retro-pharyngeal abscess causing airway obstruction: A case report. *Singapore Med J.* 2011; 52(11): e229-31
27. **Borgohain B**, Tashi G Khonglah, Cherry M Tariang. Profile of rare disabling musculoskeletal diseases in the North-Eastern Region of India: A hospital-based study. *Indian Journal of Orthopaedic Surgery.* July-Dec 2017; 3(2): 209-16
28. **Borgohain B**, Tashi G Khonglah, B.Marbaniang. A Brief Report on Amputees from North East India: A tertiary care hospital-based study. Accepted for publication in *Journal of Orthopaedics* 2018; 5 (1): 12-7
29. **Borgohain B**, P. Phukan, K. Sarma. Prevalence of osteoporosis among vulnerable adults residing in the North-Eastern Region of India: a preliminary report from a tertiary care referral hospital. Accepted for publication by *Journal of Orthopedics, Traumatology and Rehabilitation*: July-Dec 2017; 9 (2): 84-7
30. **Borgohain B**, Barman. Clinico-epidemiological profile and treatment outcome (DAS28-ESR) in Adult Rheumatoid Arthritis: Early results of intensive treatment in a tertiary care institute from North-East India. *Journal of Indian Orthopaedic Rheumatology Association.* July-Dec 2017;3 (2):29-34
31. **Borgohain B**, T.G. Khonglah, N. Borgohain. Chronic recurrent multifocal osteomyelitis (CRMO) presenting as nonhealing wound: Case report and brief review of literature: *Journal of Indian Orthopaedic Rheumatology Association* Jan-June 2017; 3(1): 27-31
32. **Borgohain B**, Saikia B, Sarma A. Proximal tibiofibular joint: Rendezvous with a forgotten articulation. *Indian J Orthop.* 2015; 49(5): 489-95
33. **Borgohain B**, Saikia B, Sarma A. Cultivate.... research an attitude and learning a passion. *Indian J Orthop.* 2014 Nov; 48(6):631-2
34. **Borgohain B**, N.Borgohain, P. Tittal: *Original article*: "Double parabolic K-Wires for definitive treatment of unstable intra-articular phalangeal fractures of hand". *Indian J Orthop.* 2012; 46 (6): 680-4
35. **Borgohain B**. Salvage of infected total knee arthroplasty with ilizarov external fixator: Letter to the editor. *Indian J Orthop.* 2012; 48 (4):470
36. **Borgohain B**. (Editorial) treatment evolution and evidence Based practices in managing thoraco- lumbar spine injuries. *North East Orthoscan* 7 (3); 2011: 5-9
37. K B Attri, **Borgohain B**: "Total knee replacement in severe varus deformity: A brief insight". *North East Orthoscan* 2011; 7(3) 104-8
38. M. Kapoor, **Borgohain B**, A. Mishra et al. Perioperative management in orthopaedic surgery: Patients with coronary artery disease. *North East Orthoscan* 2011; 7(3): 61-7

Book Chapters

1. **Borgohain B**, S.Lahkar. Ankylosing Spondylitis and other seronegative spondyloarthropathies. Textbook of Orthopaedics and Trauma. 3rd Edition. (Editor: Kulkarni GS, Jaypee publication, India)
2. **Borgohain B**. Other spondyloarthropathies. Textbook of Orthopaedic Rheumatology. 1st Edition, Delhi; Jaypee 2021
3. **Borgohain B**. Otherspondyloarthropathies. TextbookofOrthopaedicRheumatology.1st Edition, Delhi; Jaypee 2021
4. **Borgohain B**, S. Arun, P. S. Rama Sreekanth, S. Kanagaraj. Biomaterials in Total Hip Replacements: Evolution of basic concepts, trends and current limitations, Trends in Biomaterials. (Editors: G.P. Kothiyal, A. Srinivasan), Pam Stanford, Hong Kong

Pioneering Work in Orthopaedics

1. Performed the first successful Total hip and Total knee Replacement, spine surgery under operating microscope and heads the Sports injury clinic since 2010 at NEIGRIHMS
2. Developed nanotechnology based Indigenous artificial limb with IIT Guwahati 2012-2015
3. Developed New Hip Fixation Device with IIT Guwahati 2020-2022 (Patent awaited)
4. Regularly performs Arthroscopic Sports Surgery of Knee and Ankle joint on sportspersons
5. Delivered over 100 invited lectures at Regional, National and International Conferences on Orthopaedic injuries, Joint Replacements, Sports injuries, Spine diseases, Joint diseases, hand surgery, Rehabilitation Engineering and Biomaterials
6. Trained in Computer navigated Total Knee Replacement during 2005 and 2006

Awards

1. Vocational Excellence Award of Rotary Club Shillong at Raj Bhawan 2022
2. Balu Sankaran Oration: 66th Annual Conference (Goa), Indian Orthopaedic Association 2021
3. 7th Dr Bhupen Hazarika Pillar of Humanity Award 2021-22
4. Best Researcher Award in Science-Engineering-Medicine, VD Good Professional Association (Chennai, India): 2020
5. Academic Excellence Awards 2015-16, NEIGRIHMS (For the second time)
6. Academic Excellence Awards 2014-15: NEIGRIHMS (The Highest Award of the Institute)
7. R.C. Rallan Gold Medal Nomination on Basic Science Research: 66th Annual Conference (Goa), Indian Orthopaedic Association Goa 2021
8. P. Kanabar Gold Medal Nomination on Sports Research: 64th Annual Conference (Kolkata) Indian Orthopaedic Association Kolkata 2019
9. National President's Award as the Best State Secretary, Indian Medical Association: 2020
10. Certificate of distinguished services as Medical Board Member, South Asian Games -2016
11. Certificate of distinguished services From District Commissioner, Charaideo, Assam 2018
12. Chaired scientific session in 9th world Biomaterials Congress held first time in Asia-2012

Extra-Mural Research Project:

Projects with Harvard Medical School

1. The Influence of Static Load and Sideways Impact Fall on Extramedullary Bone Plates Used to Treat Intertrochanteric Femoral Fracture: A Preclinical Strength Assessment

Funded Projects with IIT Guwahati

1. Title of the project: Feasibility studies on Carbon Nanotubes- UHMWPE Nanocomposite for Total Joint Replacements. Deptt. of Science & Technology. Govt. of India. Project completed in May, 2012. Grant: Rs 24,64 Lakhs.
2. Title of the project: Developing light weight, durable and user-friendly artificial limbs through Nanotechnology-based modification of conventional materials and optimizing mechanical component design for enhancing their functional performance. Funding agency. Deptt. of Biotechnology (2012-2015). Project completed in 2016. Grant: Rs 33.69 Lakhs.