Nilanjan Lodh, Ph.D., M.Sc.

Assistant Professor

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PROFESSIONAL OVERVIEW

Cumulative research and teaching experience of over **nine** years.

Worked as a **Postdoctoral Research fellow** at the **Johns Hopkins University** for over **two years** did research in Microbiology, Parasitology, Infectious diseases and Public Health and **taught** research based lab section of **Biology of Parasitism** (**Graduate level**). Also working as an **Adjunct faculty** with over **two years** of **teaching** experience of **undergraduate level Introductory Biology** (**Cell and Molecular Biology - lecture and lab**) in **community college.**

Worked as a **Graduate Research Assistant** (GRA) and **Graduate Teaching Assistant** (GTA) at the **University of Vermont** and had more than **six years** of **teaching** experience of **graduate and undergraduate level Population Genetics, Genetics Ecology and Evolution, Principles of Biology and Exploring Biology**. Also qualified to teach **Microbiology, Parasitology, Public Health** and **Biostatistics.** Research areas include **Population Genetics, Microbiology, Genetics, Ecology, Molecular Ecology, Evolution, Statistics** and **Computation**.

Worked as a **Part-time Lecturer** in **India** and had **one year** of **teaching** experience of both lecture and lab of **undergraduate** level **Microbiology**, **Invertebrate zoology**, **Anatomy & Physiology** and other **Zoology** courses.

EDUCATION

The University of Vermont, Burlington, USA	Ph.D.	2006 - 2012	Microbiology, Po	pulation Genetics
Calcutta University, Kolkata, India	M.Sc./ M.S.	2002-2004	Zoology	
Calcutta University, Kolkata, India	B.Sc./B.S.	1999-2002	Zoology, Botany,	Chemistry
APPOINTMENTS				
Marquette University, Milwaukee, WI, USA	Assistant l	Professor	2015 - present	Department of Clinical
				Laboartory Science
The Johns Hopkins University, Baltimore, MD, USA	Postdocto	ral Fellow	2012 - 2015	Dr. Clive Shiff
Community College of Baltimore County, Dundalk,	Adjunct F	aculty	2012 - 2014	Biology Department
MD, USA				
The University of Vermont, Burlington, VT, USA	Graduate '	Teaching Assistan	t 2006 - 2012	Dr. Lori Stevens
Indian Statistical Institute, Kolkata, West Bengal, Ind	dia Research	Associate	2005 - 2006	Dr. Joydev Chattopadhay
Vidyasagar College, Kolkata, West Bengal, India	Part-time	Lecturer	2005	Zoology department

PUBLICATIONS

- Lodh, N., Rizzo, D., Kerans, B., McGinnis, S., Fytilis, N., and Stevens, L., 2015. If you've seen one worm, have you seen them all? Spatial, community and genetic structure of tubificid communities in Montana. Freshwater Sciences 34(3), 909-917.
- **Lodh, N.,** Naples, J.M., Bosompem, K.M., and Shiff, C. 2014. Detection of parasite-specific DNA in urine sediment obtained by filtration differentiates between single and mixed infections of *Schistosoma mansoni* and *S. haematobium* from endemic areas in Ghana. PLoS ONE 9 (3), e91144. [PMID: 24632992]

- **Lodh, N.**, Mwansa, J., Mutengo, M., and Shiff, C., 2013. Diagnosis of *Schistosoma mansoni* without the stool: comparison of three diagnostic tests to detect *Schiostosoma mansoni* infection from filtered urine in Zambia. American Journal of Tropical Medicine and Hygiene 89 (1), 46-50. [PMID: 23716406]
- **Lodh, N.**, Kerans, B., and Stevens, L., 2012. The parasite that causes whirling disease, *Myxobolus cerebralis*, is genetically variable within and across spatial scales. Journal of Eukaryotic Microbiology 59 (1), 80-87. [PMID: 22151695]
- **Lodh, N.**, Stevens, L., and Kerans, B., 2011. Prevalence of *Myxobolus cerebralis* Infections Among Genetic Lineages of *Tubifex tubifex* at Three Locations in the Madison River, Montana. Journal of Parasitology 97, 531-534. [PMID: 21506853]

SOCIETY MEMBERSHIP

- ♣ North American Benthological Society: 2009 Present
- ♣ American Society of Tropical Medicine and Hygiene: 2013 Present
- ♣ American Society of Cell Biology: 2014 Present
- ♣ American Society of Parasitologists: 2014 Present

DISSERTATION

The ecology, population genetic structure and spatial genetic variability of the definitive host, stream dwelling worm *Tubifex tubifex* and *Myxobolus cerebralis*, the causative parasite of Whirling Disease in salmonid fishes. Department of Biology, University of Vermont, VT, USA, 17th February, 2012.

LEADERSHIP ACTIVITIES

- **Public Relations Director**, Graduate Student Senate, The University of Vermont, August 2010 May 2011.
 - ~ Elected by graduate student votes and maintained communication with 1300 graduate students of the University of Vermont and act as a public liaison for Graduate Student Senate.
- **Departmental Senator**, Graduate Student Senate, The University of Vermont, September 2009 to July 2010.
 - ~ Represented Biology department graduate students as a student liaison to Graduate Student Senate.
- **Graduate Student Representative**, Advisory Committee, Department of Biology, The University of Vermont, September 2009 May 2011.
 - ~ Represented Biology department graduate students as a student liaison to the department advisory committee and advocated for student wellbeing.
- **Student Member**, International Student Task Force, The University of Vermont, September 2010 August 2011.
 - ~ Represented international students as a student liaison to the University of Vermont task force.
- **President**, Indian Student Association, The University of Vermont, May 2010 October 2010.
 - ~ Elected, raised money, managed and organized several cultural and recreational gathering including "Diwali Night" for 700 people.
- **↓ Vice President**, Indian Student Association, The University of Vermont, September 2009 April 2010.
 - ~ Elected, raised money, managed accounts, actively participated in organizing several cultural programs.
- **Executive Member**, Indian Student Association, The University of Vermont, September 2007 September 2009.
 - ~ Elected, actively participated in organizing several cultural programs.
- **Moderator** for Student research Conference, The University of Vermont, 2010, 2011.
 - ~ Moderated specific scientific session of graduate student conference.
- **Student member** of interview committee of International Student Coordinator, Office of International Education, The University of Vermont, June 2009.
 - ~ Performed as a graduate student representative of search committee to hire the University of Vermont F1 coordinator.
- **Student Panel Member** for the VOICE panel, The Office of Student Life, The University of Vermont, March 2009.
 - ~ Participated as a panel member and discussed and answered about international student issues.
- **General Secretary** of Zoology Department reunion committee, Ballygaunge Science College campus, Calcutta University, Kolkata, India, 2003 2004.
 - ~ Organized, raised money, managed and oversee two consecutive reunions of the Zoology department.

CURRENT TEACHING RESPONSIBILITY

CLLS 3160: Molecular DiagnosticsCLLS 3127: Medical Microbiology

CLLS 2060: Public Health

PREVIOUS TEACHING EXPERIENCE

Adjunct Faculty Part-time	Department of Biology	Community College of Baltimore County	BIOL 110 - Cell and Molecular Biology (40 students) – Large Introductory Biology course	Lecture and Lab Undergraduate level
2012 - Present			line ductory Diology course	

A. Responsibility: Developed Cell and Molecule Biology course curriculum, guidelines and student policies, lectures and laboratory materials for **professional**, **culturally** and **ethnically diverse** undergraduate students for over **two years**. Responsibilities include **lecture and lab** through **PowerPoint presentation**, **Blackboard** maintenance, lecture and lab **exam design** and **grading**, **advising students**, holding **office hours** and attending **professional development** seminars and workshops.

Postdoctoral	Department of	Johns Hopkins	Biology of Parasitism (20	Lab
Fellow	Molecular	School of Public	students)	Graduate level
Full-time	Microbiology and	Health		
2012 - 2014	Immunology			

A. Responsibility: Taught live experiment of laboratory section for Biology of Parasitism course to graduate students for two years that dealing with the outcome of *Plasmodium berghei* ANKA exposure and drug treatment on two different mouse hosts. Responsibilities included train and advice graduate students on mouse handling and other procedures related to the experiment, mouse handling at the animal care facility, grading laboratory exams and maintaining CoursePlus.

Graduate Teaching	Department of Biology	The University of Vermont	BIOL 254 – Population genetics (25 students)	Lab Graduate level
Assistant			BCOR 102 – Ecology and Evolution (25 students part of 150 students)	Undergraduate level
Full-time			BCOR 012 – Exploring Biology (50 students out of 400 students)	Undergraduate level
2006 - 2011			BCOR 011 – Exploring Biology (50 students out of 300 students)	Undergraduate level
			BIOL 2A – Principles of Biology (40 students out of 600 students)	Undergraduate level

A. Responsibility: Taught laboratory sections and provide lectures through PowerPoint presentation for Population Genetics, Ecology and Evolution, Exploring Biology and Principles of Biology courses for graduate and undergraduate students throughout Ph.D. for over five years. Responsibilities included presentation, Blackboard maintenance, exam design, grading of both lecture and lab, advising students, and conducting office hours.

				Lecture and Lab
Lecturer	Zoology	Vidyasagar	Anatomy & Physiology	Undergraduate level
	Department	College,	Vertebrate and invertebrate Zoology	Undergraduate level
Part-Time		Calcutta	Microbiology	Undergraduate level
2004 - 2005		University		

A. Responsibility: Taught lecture and laboratory of **Zoology major courses** (30 students) **Non-zoology major courses** (50 students) and **dissection** for undergraduate zoology, **major and non –major students** for **one** year. Responsibilities include **presentation**, **exam design**, **grading** of both lecture and lab, **advising students**, and conducting **office hours**.

Postdoctoral Fellow	Department of Molecular	Johns Hopkins School	Dr. Clive Shiff
2012 – 2014	Microbiology and Immunology	of Public Health	
2012 2014			

A. Project: Developed efficient diagnosis of three major human parasites, two Schistosomes and Strongyloides by amplifying species-specific DNA from urine sediment obtained by filtration from endemic African and South American countries and implement that diagnostic approach in the field condition of endemic areas. Along with that I am also working on polyparasitism, prevalence, drug test, epidemiology and genetics of these parasites. Other responsibilities include **IRB approval** for studies, **consent form and protocol** preparation for human sample collection and getting certification (HIPPA, Ethical, Animal handling) for research.

B. Techniques:

- Trained in performing **DNA extraction** from **urine sediment obtained by filtration on filter paper**; Loop Mediated Isothermal Amplification (**LAMP**); **PCR** (repeat fragments); **Gel electrophoresis**; **PCR product purification**; **DNA sequencing** and **Sequence editing**.
- Mouse behavioral assay to determine the outcome of *Plasmodium berghei* ANKA exposure and drug treatment on two different mouse hosts.

C. Analytical software:

- Well versed in using **JMP**, **Estimate S**, and **MedCalc**.
- **D.** Achievements: Published two peer review articles in two years.
- **E. Contribution:** Established international collaboration with highly acclaimed researchers from Ghana, Zambia and Argentina.

Graduate Research Assistant	Department of Biology	The University of Vermont	Dr. Lori Stevens
2006 - 2012			

A. Responsibility: Examined the distribution, abundance and genetic population structure of parasite (*Myxobolus cerebralis*) and annelid host (*Tubifex tubifex*) of Whirling Disease (fish disease) to increase understanding of the spread, severity and potential control of myxozoan diseases among wild fish populations.

B. Techniques:

- Trained in performing DNA extraction from whole worm; PCR (generic, nested); Gel electrophoresis; PCR product purification; Gel purification; Molecular Cloning; DNA sequencing and Sequence editing.
- Learned to perform probe-based qPCR, high-resolution mastermix based qPCR and melt curve analysis.

C. Analytical software:

• Well versed in using JMP, Sequencher, Clustal, GenAlEx, Arlequin, DnaSp, GENEPOP, STRUCTURE, SAMOVA, HP-RARE, MEGA, and Phylip.

D. Computational skill:

- Well versed in Microsoft Word, PowerPoint, and Excel.
- Comfortable using Keynote, Numbers, Pages, Adobe, File maker, EndNote (Referencing).
- Knowledgeable about **Webpage designing**.
- **F.** Achievements: Published three peer review articles and two more manuscripts are in preparation.
- **G. Contribution:** Established U.S.A. collaboration with highly acclaimed researchers and won Graduate Student Assistantship from NSF EPSCoR.

All Night Study Monitor	Bailey Howe Library	The University of	
2012		Vermont	

A. Responsibility: Monitor undergraduate students all night.

Project Assistant	Agricultural and Ecological	Indian Statistical	Dr. Joydev
2005 - 2006	Research Unit	Institute	Chattopadhyay
Bengal, India and predicte	ecological and distribution pattern o d the probable distributional pattern		•
mathematical modeling.			

MENTORING and ADVISING ACTIVITIES

- **Taught molecular techniques** to a graduate student, Shterna Soiefer on Strongyloides project, May 2015 August 2015.
- **Taught molecular techniques** to a graduate student, Nicole Assumpção on Schistosomiasis project, February 2015 April 2015.
- **Mentored, advised,** and **taught molecular techniques** an undergraduate student, Jia Xin Yu on Whirling disease project, January 2008 December 2009.
- **Mentored**, advised and taught molecular techniques to several graduate and undergraduate throughout Ph.D..
- ♣ Performed several tours of Biology Department and addressed question of several prospective undergraduate students and their parents, The University of Vermont, 2010 2011.
- **Mentored, oversee** and **guide** undergraduate students, SACNAS conference, Dallas, Texas, October 2009.
- **Mentored, advised,** and **taught molecular techniques** to 12 high school students as a part of High School Outreach program, The University of Vermont April 2009.
- **Taught** Bengali language to a high school teacher, Burlington Community School, Burlington, Vermont, February 2012.

FELLOWSHIPS and AWARDS

- **Faculty Development Award**, \$600, Marquette University, USA, 2015.
- **♣ Graduate Research Assistantship grant** "Geomorphology and Biodiversity", \$15,000, VT EPSCoR, NSF EPS-0701410, January 2008 June 2008.
- **Best Poster Award** "Distribution and Severity of Whirling Disease in Natural Streams of United States", \$50.00, **Lodh N.**, Stevens L., Graduate Research Day, The University of Vermont, USA, February 2007.
- ▶ National Award on the basis of marks achieved in Masters Level (M.Sc.), \$50.00, India, 2004.
- National award on the basis of marks achieved in Graduate Level (B.Sc.), India, 2002.
- National award on the basis of marks achieved in 10th standard, India, 1997.

COLLABORATIVE WORK EXPERIENCE

- Collaborating with colleagues at the University of Zambia, Zambia on Schistosomiasis project, 2012 present.
- Collaborating with colleagues at the Noguchi Memorial Institute for Medical Research, Ghana on Schistosomiasis project, 2012 – present.
- Working with colleagues at the University of Salta, Argentina on Strongyloidiasis project, 2013 present.
- ♣ Collaborated with colleagues from University of Montana on Whirling disease project.

MANUSCRIPT REVIEW EXPERIENCE

Review manuscripts for PLoS ONE.

GRANT WRITING EXPERINCE

♣ Wrote several grant as a Postdoctoral Research Fellow and as a Ph.D. candidate.

- ~ R21 (2014) Score 30.
- ~ NSF grant
- ~ Internal Johns Hopkins University grant Score 2.65 out of 5 (2013) and 2.75 out of 5 (2013)
- ~ Bill and Melinda Gates Foundation grant

MEDIA COVERAGE of SCIENTIFIC WORK

- **Interview** about **Schistosomiasis diagnostic research**, Bloomberg School of Public Health Magazine, Fall 2013 issue, The Johns Hopkins University, October 2013.
- **Interview** about **Whirling Disease research**, University Communication, Student Research Conference 2011, The University of Vermont, April 2011.

SPECIAL SKILLS

- **♣** Fluent in **English**, **Hindi** and **Bengali** languages.
- **Lesson** Experienced with respect to **ordering lab supplies and office supplies**.
- ♣ Performed several stage shows.
- ♣ Well versed in painting skills.
- Well versed in poetry reading.

SCIENTIFIC PRESENTATIONS

• Extramural Presentations – Oral:

- LAMP: Point of care diagnosis for multiple Schistosome parasites", **Lodh N.**, Mikita K., Shiff C. J., American Society for Parasitologists, Nebraska, USA, June 2015.
- ◆ "Detection of mixed Schistosome infections by amplifying species-specific DNA from urine sediment obtained by filtration", **Lodh N.**, Naples J. M., Bosompem K., Quartey J., Shiff C. J., American Society of Tropical Medicine and hygiene, Louisiana, USA, November 2014.
- * "Point of care diagnosis for Schistosomiasis: multi parasite DNA detection in single urine sample", **Lodh N.**, Naples J. M., Bosompem K., Shiff C. J., American Society for Parasitologists, Louisiana, USA, July 2014.
- * "Assessment of spatial, community and genetic structure of stream dwelling tubificid worms in Montana, USA", **Lodh N.**, Rizzo, D. M., Kerans, B. L., McGinnis S, Fytilis, N., Stevens L., American Society for Parasitologists, Louisiana, USA, July 2014.
- "Biotic and Abiotic Correlates to Whirling Disease Risk", McGinnis S, Kerans, B. L., Lodh N., McMahon T. E., Stevens L., Montana Section American Water Resources Association conference, Montana, USA, October 2013.
- * "New gold standard of Schistosome diagnosis without using stool", **Lodh N.**, Naples J. M., Bosompem K., Shiff C. J., American Society of Tropical Medicine and hygiene, Washington DC, USA, November 2013.
- 4 "A DNA based method to identify tubificid taxa in stream communities in the Madison River, USA", Stevens L., **Lodh N.**, Rizzo D., Mathon B., Kerans B. L., Worm Summit, Turkey, October, 2009.
- ♣ "Genetic Variability of *Tubifex tubifex*, the Intermediate Host of Whirling Disease", **Lodh N.**, Stevens L., Kerans, B. L., Rizzo, D. M. North American Benthelogical Society, Wisconsin, USA, May 2009.
- * "Factors related to spatial patterns in whirling disease risk", Kerans B. L., McGinnis S., McMahon T. E., **Lodh** N., and Stevens L., North American Benthelogical Society, Wisconsin, USA, May 2009.
- "Effect of Prostaglandin on reproduction of Indian Major Carps", Lodh N., Department of Zoology, Calcutta University, Kolkata, India, May 2004.

• Extramural Presentations – Poster:

- LAMP: Point of care diagnosis for Schistosoma mansoni and S. haematobium", **Lodh N.,** Mikita K., Shiff C. J., American Society for Parasitologists, Pennsylvania, USA, October 2015.
- ♣ "Detecting multi Schistosome species DNA in single urine sample by LAMP: a novel diagnostic test for Schistosomiasis", Lodh N., Mikita K., Naples J. M., Bosompem K., Quartey J., Shiff C. J., American Society of Tropical Medicine and hygiene, Louisiana, USA, November 2014.
- ♣ "The 18S rRNA and ITS-1 variability of *Myxobolus cerebralis*, the causative parasite of Whirling Disease", **Lodh N.**, Stevens L., Kerans, B. L., Rizzo, D. M., New England Association of Parasitologists, Massachusetts, USA, November 2010.
- university find the Genetic Variability and Spatial Distribution of Tubifex tubifex, Yu J., Stevens L., Lodh N.,

Droppman M., Rizzo, D. M. Society for Mathematical Biology, Toronto, Canada, August 2008.

• Presentations at the Johns Hopkins University:

- **♣** Talk "Schistosomiasis: diagnosis and Beyond", **Lodh N.**, Department of Molecular Microbiology and Immunology, School of Public Health, Johns Hopkins University, Maryland, USA, July 2013.
- Poster "Good Things are Worth Waiting for": Approach for Accurate Diagnosis of Schistosomiasis Infected People in Zambia", **Lodh N.,** Mwansa J. C., Mutengo, M. M., Shiff, C. J., Postdoctoral Symposium, School of Public Health, Johns Hopkins University, Maryland, USA, June 2013.
- Talk "Whirling disease and Schistosomiasis", **Lodh N.**, Department of Molecular Microbiology and Immunology, School of Public Health, Johns Hopkins University, Maryland, USA, June 2012.

• Presentations at the University of Vermont:

- ♣ Poster "Genetic Variability Across Spatial Scales of the Causative Parasite of Whirling Disease Myxobolus cerebralis", Lodh N., Stevens L., Kerans, B. L., Rizzo, D. M. VT EPSCoR, NSF Annual Research Day, University of Vermont, USA, June 2011.
- **↓** Talk "Comparison of 18S and ITS-1 rRNA of *Myxobolus cerebralis*, the causative parasite of the Whirling Disease", **Lodh N.**, Student research Conference, University of Vermont, USA, April 2011.
- **♣** Talk "Genetic variability of the Whirling Disease Host and Parasite", **Lodh N.**, Department of Biology, The University of Vermont, USA, April 2011.
- **↓** Talk "The Genetic Variability of *Myxobolus cerebralis*, the causative parasite of Whirling Disease", **Lodh N.,** Student Research Conference, University of Vermont, USA, April 2010.
- ♣ Talk "Investigating the Spatial Distribution of Stream Sediment Dwelling Worms", Yu J., Stevens L., Rizzo D., Morrissey L., Lodh N., Kerans B. L., Student Research Conference, University of Vermont, USA, April 2010.
- Talk "A multiplex qPCR assay to identify tubificid taxa in stream communities", **Lodh N.**, Stevens L., Rizzo D., Mathon B., Kerans B. L., VT EPSCoR annual meeting, Vermont, USA, March 2010.
- **♣** Talk "Is *Myxobolus cerebralis* Variable: Whirling Disease Perspective", **Lodh N.**, EcoLunch Group, Department of Biology, The University of Vermont, USA, November 2009.
- **↓** Talk "Impact of Genetic Variability of *Tubifex tubifex*, the Intermediate Host of Whirling Disease", **Lodh N.**, Graduate Research Day, University of Vermont, USA, April 2009.
- Talk "Genetic Variability of the Parasite and the Intermediate Host of Whirling Disease", **Lodh N.**, EcoLunch Group, Department of Biology, The University of Vermont, USA, March 2009.
- **↓** Talk "Investigating the Spatial Distribution of the Host of *Myxobolus cerebralis*, *Tubifex tubifex* and Other Stream Macro Invertebrates", Yu J, Stevens L., Rizzo D., Pearce A., Morrissey L., **Lodh N.,** Kerans B. L., McNair, The University of Vermont, USA, August 2008.
- Talk "Spatial and Temporal Variation in the Incidence of the Whirling Disease in the Intermountain West", **Lodh N.,** Graduate Research Day, University of Vermont, USA, March 2008.
- Talk "Spatial and Temporal Variation in the Incidence of the Whirling Disease in its Intermediate host", **Lodh N.,** EcoLunch Group, Department of Biology, The University of Vermont, USA, March 2008.
- Poster "Counter Propagation Artificial Neural Networks to Predict Disease Risk", Stevens L., Kerans, B. L., **Lodh N.,** Rizzo D.M., VT EPSCoR, NSF Annual Research Day, University of Vermont, USA, June 2008
- Talk "Genetic Variability in the Parasite and Intermediate Host of Whirling Disease", **Lodh N.,** EcoLunch Group, Department of Biology, The University of Vermont, USA, September 2007.
- Poster "Distribution and Severity of Whirling Disease in Natural Streams of United States", **Lodh N.,** Stevens L., Graduate Research Day, University of Vermont, USA, February 2007.

CONFERENCES, SYMPOSIUM and WORKSHOPS ATTENDED

Conferences and Symposiums:

- [♣] 7th Annual NIH career Symposium, National Institute of Health, Bethesda, Maryland, USA, May 2014.
- 4 2nd Annual Symposium on "Mass Spectrometry Applications in the Biomedical Sciences", Baltimore, Maryland, USA, May 2014.
- ♣ 62nd Annual Meeting of American Society of Tropical Medicine and hygiene, Washington DC, USA, November 2013.
- ♣ 18th Annual Meeting of New England Association of Parasitologists, Amherst, Massachusetts, USA, November 2010.
- 4 6th Annual NIH career Symposium, National Institute of Health, Bethesda, Maryland, USA, May 2013.
- ♣ Symposium on "Clinical and Transitional Research: Inflammation and Cancer", The University of Vermont,

- Burlington, Vermont, USA, 2010.
- ♣ Conference on "Improving the Human Condition: Challenges for Interdisciplinary Science", SACNAS, Dallas, Texas, USA, October 2009.
- ♣ 57th Annual Meeting of North American Benthelogical Society, Michigan, Wisconsin, USA, May 2009.
- **↓** Symposium on "Environmental Cancers: Risk Factors, Mechanisms, and Therapies", The University of Vermont, Burlington, Vermont, USA, 2009.
- ♣ NSF Research Day, The University of Maine, Orono, Maine, USA, 2008.
- Conference on "Clinical and Translational Research: Treating Breast and GI Cancers", The University of Vermont, Burlington, Vermont, USA, 2007.
- Lonference on "Biosafety", Department of Zoology, Vidyasagar College, Calcutta University, Kolkata, West Bengal, India, February 2006.
- ♣ Conference on "Biological Research Now and Beyond", Department of Zoology, Calcutta University, Kolkata, West Bengal, India, March 2005.
- National Symposium on "Zoology A Neorealistic Approach", Department of Zoology, Calcutta University, Kolkata, West Bengal, India, March 2004.
- 4 Conference on "Integrated Pest Management", Science for Society, Rahara, West Bengal, India, February 2000.

Workshops:

- Preparing for Industry Careers, SciPhD, Johns Hopkins School of Public Health, Baltimore, Maryland, USA, April 2014.
- → Grantcraft, Johns Hopkins Medicine, The Johns Hopkins University, Baltimore, Maryland, USA, August 2013.
- ♣ Shistosomiasis Training Course, Biomedical Research Institute, Rockville, Maryland, USA, September 2012.
- 4 Aquaculture training program, WBCADC Ajodhya Hills, Department of Zoology, Calcutta University, Purulia, West Bengal, India, February March 2004.
- Wastewater-fed aquaculture, Central Institute of Freshwater Aquaculture (C.I.F.A.), Rahara, West Bengal, India, November 2003.