# Paul Lindo

## Accomplishments

- As Director, I have put together a Biosafety program which is being reviewed by regulators for a new BSL-2 laboratory registration to work with Select Agents and Toxins.
- As Lab manager, UMASS Dartmouth, Botulinum Research Center, which operated with about 20+
  personnel, I have trained personnel in Safety, Security and helped with scientific collaborations both on & off
  Campus. I was facility liaison for maintenance, regulators and local authorities involved with facility upkeep
  (This included a mouse vivarium, confoccal microscope and microscopy(SEM, AFM, Fluoro) suite,
  BSL2/BSL3 & ABSL3 labs and open lab space total 22,000 sq.ft. building)
- Responsible Official for CDC Select Agent Program at UMASS Dartmouth.
- Consulted for with various collaborators with projects including GMP Phase I product development.
- Involved with performing, training and documenting research for many biological and biochemical techniques.
- Trained many researchers, students and collaborators in safety, security, and good lab practices.

# **Professional Experience**

#### Director of Operations- Institute of Advanced Sciences, Dartmouth, MA- 2014-present

- Responsible for the operations of a newly formed not for profit organization.
- Collaborate with many federal agencies, commercial entities, and academia for the purposes to advance sciences and understanding.
- Coordinate the future setup and establish standard operating procedures of the laboratory that is to be brought online.

#### Director of Operations, Director of BioSafety- Prime Bio, Inc., No. Dartmouth, MA- 2012-present

- Responsible Official for the select agent program for a registered BSL-2 laboratory.
- Responsible to schedule, monitor and train associates' research, safety and incident response readiness. Also, in charge of training personnel on various biological research equipment and biological techniques including: SDSPAGE, PCR, UV/VIS spectroscopy, Western Blot, ELISA, Chromatographic separations (open column, HPLC, LPC, affinity tag, etc.), bacterial cultures, mammalian cultures, recombinant protein production, protein assays, Sterile technique, imaging & imaging analysis and good laboratory practices.
- In charge of processing orders from customers, budget purchases and manage expenses for lab maintenance, restocking, procurement of equipment and facility upkeep.
- Manage biosafety, coordination with local authorities, train associates, and work with regulatory agencies requirements for security, safety and incident response.
- Track progress in projects, monitor deadlines for submissions, and update collaborators and other agencies on milestones.
- Keep owners up to date with progress on facility upkeep, project statuses, training, equipment requirements and documentation for projects and agency submissions.

#### Lab Manager / Research Associate – UMASS Dartmouth, No. Dartmouth, MA 1994-97/2000–2012

- Performed many lab duties to produce, track, ship and issue select agents, toxins and other reagents for scientific study.
- Manage the training, safety, security and compliance of the Select Agent Program, Certified through CDC in a BSL-2, BSL-3 and ABSL-3 laboratory.
- Training in shipping hazardous goods to and from other entities.
- Performed documentation in compliance with GMP protocols for product development.
- Perform multiple duties with different lab techniques such as: Aseptic handling techniques, ELISA, tissue and bacterial cell culture, Confoccal microscopy, Circular dichroism, FTIR spectroscopy, UV/VIS Spectroscopy, Chromatography (HPLC, LPC, AKTA, Open column), Protein assays (concentration, kinetics, etc.)

- Responsible for documenting, organizing and presenting information Safety, Quality and Production to Administrators on regular basis to review safety, quality, production and customer service.
- Familiar with ISO9001 compliance requirements.

# Education

Bachelors Degree in Science– UMASS Dartmouth, No. Dartmouth MA • 1995 Associates Degree in Arts– Bristol Community College, Fall River, MA • 1992 High School Diploma- Bishop Connolly High School, Fall River, MA • 1989

### Poster presentations

- a) Raj Kumar, Wei Ping Yang, Thomas Feltrup, Guncha Ambrin, Tzuu Wang Chang, Paul Lindo, Shuowei Cai, and Bal Ram Singh (2015). Inter Botulinum Research Coordination Committee Conference in Philadelphia. October 25 – 28, 2015.
- b) Lei Wang, Yi Sun, Weiping Yang, Paul Lindo, Bal Ram Singh (2015). Type A Botulinum Neurotoxin Complex Proteins Differentially Modulate Host Response of Neuronal Cells. Ninth Botulinum Research Symposium, New Bedford, MA, USA, August 12 -14, 2015

## **Publications**

Type A Botulinum Neurotoxin Complex Proteins Differentially Modulate Host Response of Neuronal Cells. Lei Wang, Yi Sun, Weiping Yang, Paul Lindo, Bal Ram Singh. Toxicon In press. Accepted Feb. 2014.

Endopeptidase activities of **botulinum** neurotoxin type B complex, holotoxin, and light chain. Wang HH, Riding S, **Lindo** P, Singh BR. Appl Environ Microbiol. 2010 Oct;76(19):6658-63. doi: 10.1128/AEM.00731-10. Epub 2010 Aug 6.

The identification and biochemical characterization of drug-like compounds that inhibit **botulinum** neurotoxin serotype A endopeptidase activity.

Cai S, Lindo P, Park JB, Vasa K, Singh BR. Toxicon. 2010 Apr 1;55(4):818-26. doi: 10.1016/j.toxicon.2009.11.017. Epub 2009 Dec 7.

Immunological characterization of the subunits of type A **botulinum** neurotoxin and different components of its associated proteins.

Kukreja R, Chang TW, Cai S, **Lindo** P, Riding S, Zhou Y, Ravichandran E, Singh BR. Toxicon. 2009 May;53(6):616-24. doi: 10.1016/j.toxicon.2009.01.017.

<u>Cloning</u>, expression, purification, and characterization of biologically active recombinant hemagglutinin-33, type A **botulinum** neurotoxin associated protein.

Zhou Y, Paturi S, **Lindo** P, Shoesmith SM, Singh BR. Protein J. 2007 Jan;26(1):29-37.

Hemagglutinin-33 of type A **botulinum** neurotoxin complex binds with synaptotagmin II. Zhou Y, Foss S, **Lindo** P, Sarkar H, Singh BR. FEBS J. 2005 Jun;272(11):2717-26. Preliminary crystallographic studies of a protease resistant **botulinum** neurotoxin associated protein <u>Hn-33</u>.

Hadfield AT, Petsko G, **Lindo** P, Singh BR. Acta Crystallogr D Biol Crystallogr. 1999 Jun;55(Pt 6):1237-9.