



Institute of
Advanced
Sciences

Botulinum
Research
Center

86-410 Faunce Corner Rd
North Dartmouth
MA, 02747

Tele: (

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Raj Kumar, Institute of
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Fourth Announcement

15th Annual Botulinum Research Symposium, August 18-19, 2021

The 15th annual symposium organized by the Botulinum Research Center at the Institute of Advanced Sciences, Dartmouth, MA.

Theme: Redesigned Botulinum Neurotoxins

Tentative Program

Wednesday, August 18, 2021 (Time, US Eastern Daylight Saving Time)

Session I -Inaugural Session Chair: Michael Adler

9:00 – 9:30 AM **Welcome and Introductory Remarks – Bal Ram Singh**, BRC, INADS

9:30 – 10:15 AM **A chimeric toxin-based delivery platform for post-exposure treatment of botulism- Min Dong**, Harvard Medical School

10:15 – 10:30 AM Q&A

10:30 – 10:45 AM **Break**

Session II Chair: TBA

10:45 – 11:15 AM **Local injection of an anti-cholinesterase restores muscle function post BoNT-A impairment – Sameer B. Shah**, DelNova, Inc., USA

11:15 – 11:45 AM **Treatment of botulism with 3,4-diaminopyridine – Michael Adler**, US Army Research Institute of Chemical Defense, Aberdeen Proving Ground, MD, USA

11:45 – 12:15 PM **Inhibition of BoNT enzymatic activity with sodium phosphate – Suzy Kalb**, CDC, Atlanta, USA

12:15 – 12:45 PM **Lunch – cum – Poster breakout session**

Session III Chair: Brenda Wilson, Univ of Illinois

12:45 – 1:15 PM **Redesigned botulinum neurotoxin endopeptidase and its potential use/misuse – Travis Blum**, Harvard University

1:15 – 2:30 PM

Panel Discussion - Risk and Rewards of Redesigned Botulinum Neurotoxins – Andy Pickett, Moderator

Klaus Fink, Merz, Germany
Michael Adler, USARICD, USA
Min Dong, Harvard Medical School
Shuwei Cai, UMass Dartmouth
David Hodge, Former Program Officer, Homeland Security

Thursday, August 19, 2021

Session IV

Chair: TBA

9:00 – 9:10 AM

Introduction to the BR DasGupta Memorial Lecture – Bal Ram Singh and V. Sathyamoorthy

9:10 – 9:55 AM

Making of IncobotulinumtoxinA (Xeomin™), Dr. Jurgen Frevert, Merz Pharma, Germany

9:55 – 10:10 AM

Q&A

Session V

Chair: TBA

10:10 – 10:40 AM

Further Research Progress on Novel medical applications of botulinum neurotoxins – longevity and macular disease, Gary Borodic, Harvard Medical School, Boston, USA

10:40 – 11:10 AM

Gliosis mediated mechanism of Action of Isolated and Complete BoNT/A, Ghuncha Ambrin, UMass Dartmouth, MA, and Univ of North Carolina Charlotte, USA

11:10 – 11:25 AM

Break

Session VI

Chair: Andy Pickett, Toxin Bioscience

11:25 AM – 12:25 PM

Lifetime Achievement Award - Speeches

Session VII

Chair: John Barr, CDC, Atlanta, USA

12:25 – 12:55 PM

Biosimilar Botulinum Neurotoxin Product– Enan Guan, Biologicsa & BoNT Consulting, Washington DC, USA

12:55 – 1:25 PM

Antibody-free Detection and Quantitation of Botulinum Neurotoxins by Nano LC with Targeted Multistage Mass Spectrometry– Markus Kalkum, Beckman Research Institute, USA

1:25 – 1:55 PM **Conformational Dynamics of Botulinum Toxin and its implication on evolution– Raj Kumar, Institute of Advanced Sciences, Dartmouth, USA**

1:55 – 2:25 PM **Issues with Redesigned Botulinum Neurotoxins, Andy Pickett, Toxin Biosciences, UK, and Botulinum Research Center, INADS, Dartmouth, MA**

2:25 – 2:40 PM Closing

**Zoom Conference registration
- Join Zoom Meeting**

<https://us02web.zoom.us/j/84052256405?pwd=NfZBMzlrRXk3SVhYRFIudVYyRi96UT09>

Meeting ID: 840 5225 6405
Passcode: 096956