

Toshiaki Sunazuka, Full Professor

Born ; 20th September, 1959

Birthplace ; Chiba, Japan

CURRICULUM VITAE

Kitasato Institute for Life Sciences, and Graduate School of Infection Control Sciences,
Kitasato University, Tokyo, 108, Japan

Visiting Professor, Tokushima University

Visiting Lecturer, Tokyo Institute of Technology,

Visiting Lecturer, Chiba University

Visiting Lecturer, Osaka City University

Education

1983 Graduated at School of Pharmaceutical Science, Kitasato
University, Thesis “Chemical Modification of 16-Membered
Macrolide, Spiramycins” directed by Professor S. Omura

1985-1988 Ph.D.-School of Pharmaceutical Science, Kitasato University,
Thesis “Development of the Motilides, Macrolides with Gastrointestinal
Motor Stimulating Activity” directed by Professor S. Omura

1988-1990 Post-Doctoral Fellowship - Department of Chemistry,
University of Pennsylvania, Theme “Total Syntheses of Paspalicine
and Paspalinine, Architecturally Complex Synthetic Targets”
directed by Professor A. B. Smith, III

Experimence

1990-1993 Senior Researcher, Lab. of Bio-Organic Chemistry, Research Center for
Biological Function, The Kitasato Institute

1994-2001 Assistant Professor, School of Pharmaceutical Science, Kitasato University,
and Visiting Senior Researcher, Research Center for Biological Function, The Kitasato
Institute

2001- Visiting Lecturer, Chiba University

2002- Associate Professor, Kitasato Institute for Life Sciences, Kitasato University

Visiting Director, The Kitasato Institute

2003- Visiting Lecturer, Tokyo Institute of Technology

2005- Full Professor, Kitasato Institute for Life Sciences, and Graduate School of Infection Control Sciences, Kitasato University

2010- Visiting Lecturer, Osaka City University

2010- Head of Research Promotion Centers, Kitasato Institute for Life Sciences, Kitasato University

2011- Visiting Professor, Tokushima University

Honors and Awards

1991- Member, Organizing Member of Novel Action of Macrolides, Japan

1996 Ninomiya Award

1998-2003 Member, Editorial Board-Journal of the Pharmaceutical Society of Japan

1998 Progress Award in Synthetic Organic Chemistry, Japan

1999-2000 Member, Editorial Board-Journal of Synthetic Organic Chemistry, Japan

2000-2003 Member, Organizing Member of Synthetic Organic Chemistry, Japan

2003 Sumiki-Umezawa Memorial Award

2004 Morimura Award

2003- Member, Organizing Member of Synthetic Organic Chemistry, Japan

2005- Member, Organizing Member of the Pharmaceutical Society of Japan

2007- Member, Organizing Member of the Chemical Society of Japan

2008 The Pharmaceutical Society of Japan Award for Divisional Scientific Promotions

2009 Astellas Award for Organic Chemistry in Life Science, Synthetic Organic Chemistry

2009-2010 Member, Board of Directors-Journal of Synthetic Organic Chemistry, Japan

2010-2011 Chairperson, Editorial Board-Journal of Synthetic Organic Chemistry, Japan

Research

His research interests are in the areas of synthetic organic chemistry, medicinal, and bioorganic chemistry of bioactive microbial natural products.

He has succeeded the total syntheses of 35 novel complex natural products including Lactacystin, Pyripyropenes, Macroshelides, Madindolines, Arisugasins, Paspalicine, so on to date.

He has also succeeded the development of Motilide (motilin like macrolide) which is on Phase II trial as a digestive medicine, and of ME5343 (Pyripyropene analogs) which will be commercialized as an insecticide around the world in 2014, and also of EM900 which is novel antiinflammatory macrolide without antibacterial activity.

He is co-author of over 172 publications and 53 patents, and has delivered over 95 invited lecture including the international meetings.

His research interests are

- 1) The determination of absolute stereochemistry of bioactive natural products
- 2) The total synthesis of bioactive natural products
- 3) The synthesis of bioactive natural product analogs and structure-activity relationships
- 4) Drug design by computer analysis
- 5) Bio-conversion by microbial or enzyme
- 6) Combinatorial chemistry
- 7) Development of new synthetic methods
- 8) Macrolide chemistry