**Ho-Yin Lo, Ph.D.**
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## Highlights

- Highly experienced medicinal chemist with extensive managerial track record in the pharmaceutical industries in US and China.
- Knowledgeable of the whole new drug discovery and development process
- Having a track record of advancing drug candidates to development and clinical trial.
- Constantly generating innovative ideas on new drug discovery, novel therapeutic targets and new strategy on pharmaceutical research
- Approachable and out-going people manager
- Highly motivated, energetic team player

## Professional Experience

2014/1-Present

**President and CEO**

*Synovel Laboratory LLC. (USA)*

- Founder of the company

2012/12-2013/12

**Associate Vice President of Research**

*KBP Biosciences Co. Ltd. (China)*

- Oversee the research and development portfolio and operation
- Managing 50+ employees across different departments (Medicinal Chemistry; Process Chemistry, Research Project Management; Development Project Management; Intellectual Property; Safety and Environmental)
- Taking part in managing external collaborations with CROs and academics institutions
- Act as a secondary role of business development (BD) liaison for the company, presenting company's projects to potential interest parties and establish

professional connections to BD personnel in pharmaceutical companies in China and overseas (Japan, South Korea, Europe and the US)
- Being a member of the upper management team and take part in company business decision and strategic planning.

2012/4-2012/12

**Senior Director, Project Management**,

*KBP Biosciences Co. Ltd. (China)*

- Act as a molecular designer for all the research projects.
- Oversee research project progress and address critical issue to generate high quality pre-development candidates
- Managing research projects portfolio
- Proposing new therapeutic targets for 3 major areas (anti-bacterial; Autoimmune diseases; End organ degenerative diseases)
- Managing 25 employees across 3 departments (Research Project Management; Medicinal Chemistry; Intellectual Property)

2008-2012

**Principal Scientist, Medicinal Chemistry**,

*Boehringer Ingelheim Pharmaceuticals Inc. (USA)*

- FLAP program for atherosclerosis
    - As a sub-team leader, coordinated 6 internal and 2 external CRO FTEs for SAR effort on a front runner series, leading to clinical candidate
- RORγt program for Psoriasis
- Renal working group
    - Provided chemistry assessment for new target proposals in the chronic kidney disease (CKD) area

2002-2008

**Senior Scientist, Medicinal Chemistry**,

*Boehringer Ingelheim Pharmaceuticals Inc. (USA)*

- ITK kinase inhibition program for inflammation disease
- sEH program for hypertension
- Chymase program for heart failure
    - As a sub-team leader, coordinated 3 internal FTEs for SAR effort on front runner series

- Coordinated research effort of external CRO FTEs

- NHE-1 program for heart failure
  - As a sub-team leader, coordinated 2 internal FTEs, to deliver over 200 gm of a pre-clinical candidate for development profiling
- Hypertension working group
  - Provided chemistry assessment for new target proposals and in-licensing programs in the anti-hypertensive-plus area

2000-2002 **Post-doctoral Fellow**,
*The Ohio State University (USA)*
Research Supervisor: Prof. Leo A. Paquette
- Synthetic Study for the Total Synthesis of Taxol

1999-2000 **Post-doctoral Fellow**,
*The Chinese University of Hong Kong*
Research Supervisor: Prof Tony K. M. Shing
- Continuation of the study for the synthesis of paclitaxel analog

1996-1999 **Teaching Assistant**,
*The Chinese University of Hong Kong*

## Education

1996-1999 **Doctor of Philosophy**
Department of Chemistry, *The Chinese University of Hong Kong*,
Hong Kong, China
Research Supervisor: Prof. Tony K. M. Shing
Thesis title: A Synthetic Approach toward Paclitaxel Analogs from (S)-(+)-Carvone

1993-1996 **Bachelor of Science**
Department of Chemistry, *Hong Kong Baptist University*,
Hong Kong, China
Research Supervisor: Prof H. W. Leung

Thesis title: The study of Chinese Medical Material by Novel MS Techniques

## Affiliation

1. Member of the American Chemical Society since 2003
2. Member of the New York Academy of Science since 2009
3. Member of the Sino-American Pharmaceutical Professionals Association (SAPA) since 2011
4. Member of CURE since 2013

## Presentations

1. Poster presentation "Benzimidazolone as Potent Chymase Inhibitor: Modulation of Reactive Metabolite Formation in the Hydrophobic ($P_1$) Region" in Gordon Research Conference: Drug Metabolism 2009
2. Guest speaker in the Sino-American Pharmaceutical Professionals Association Connecticut Pre-Chapter (SAPA-CT) 1st Annual Conference at Yale University on Feb 22, 2014.
3. Guest speaker in the Sino-American Pharmaceutical Professionals Association New England Chapter (SAPA-NE) 16th Career Development Symposium on Mar 8, 2014.
4. Guest speaker in the Chinese-American Association for Sciences and Technology in Connecticut (CAST-CT) spring seminar on Mar 29, 2014.

## Awards

1st Jinan High-Tech Zone Entrepreneur Award (2014)

## List of Publications

1. Shing T. K. M.*; Lo, H. Y.; Mak, T. C. W. "Diels-Alder Reaction of *R*-(-)-Carvone with Isoprene" *Tetrahedron* **1999**, *55*, 4643-4648

2. Hofferberth, J. E.; Lo, H. Y.; Paquette, L. A.* " Stereospecific Anionically Promoted Transannular Hydride Shifts in Medium-Ring Hydroxy Ketone. Probe

of Their Reversibility and the Potential for Regiocontrol" *Org. Lett*. **2001**, *3*, 1777-1779

3. Shing, T. K. M.*; Lee, C. M.; Lo, H. Y. "Synthesis of the CD ring in taxol from (S)-(+)-carvone" *Tetrahedron Lett*. **2001**, *42*, 8361-8363

4. Paquette, L. A.*; Lo, H. Y.; Hofferberth, J. E.; Gallucci, J. C. "A Delicate Balance of Energetics. Subtleties Associated with a-Ketol-Based Bridge Migration To Afford 9-Keto-10β-*p*-methoxybenzyloxytaxanes" *J. Org. Chem* **2003**, *68*, 2276-2281

5. Paquette, L. A.*; Lo, H. Y. "Chemical Modification of a Highly Functionalized Taxane. The Consequences of an Absent Bridgehead Double Bond on Oxetane D-Ring Construction" *J. Org. Chem* **2003**, *68*, 2282-2289

6. Shing, T. K. M.*; Lee, C. M.; Lo, H. Y. "A synthetic approach toward taxol analogs: studies on the construction of the CD ring" *Tetrahedron* **2004**, *60*, 9179-9197

7. Lo, H. Y.*; Bentzien, J.; Fleck, R. W.; Pullen, S. S.; Khine, H. H.; Woska, J.; Kugler, S. Z.; Mohammed, K.; Takahashi, H. "2-Aminobenzimidazoles as Potent ITK Antagonists: Trans-stilbene-like Moieties Targeting the Kinase Specificity Pocket" *Bioorg. Med. Chem. Lett*. **2008**, *18*, 6218-6221

8. Lo, H. Y.*; Bentzien, J.; White, A.; Man, C. C.; Fleck, R. W.; Pullen, S. S.; Khine, H. H.; King, J.; Woska Jr., J. R.; Mohammed, K.; Roth, G. P.; Takahashi, H. "2-Aminobenzimdazoles as Potent ITK Antagonists: De Novo Design of a Pyrrole System Targeting an Additional Hydrogen Bonding Interaction" *Tetrahedron Lett*. **2008**, *49*, 7337-7340

9. Moriarty, K. J*.; Takahashi, H.; Pullen, S. S.; Khine, H. H.; Sallati, R. H.; Raymond, E. L.; Woska Jr., J. R.; Jeanfavre, D. D.; Roth, G. P.; Winters, M. P.; Qiao, L.; Ryan, D.; DesJarlais, R.; Robinson, D.; Wilson, M.; Bobko, M.; Cook, B. N.; Lo, H. Y.; Nemoto, P. A.; Kashem, M. A. *et al* ."Discovery, SAR and X-ray structure of 1H-benzimidazole-5-carboxylic acid cyclohexyl-methyl-amides

as inhibitors of inducible T-cell kinase (Itk)" *Bioorg. Med. Chem. Lett*. **2008**, *18*, 5545-5549

10. Lo, H. Y. "Update article on Phenyl Azide", In *Electronic Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A. Ed; John Wiley & Sons, Ltd: **2008**.

11. Lo, H. Y. "Itk inhibitors: a patent review" *Expert Opin. Ther. Patents* **2010**, *20(4)*, 459-469

12. Lo, H. Y.*; Man, C. C.; Fleck, R. W.; Farrow, N. A.; Ingraham, R. H.; Kukulka, A.; Proudfoot, J. R.; Betageri, R.; Kirrane, T.; Patel, U.; Sharma, R.; Hoermann, M. A.; Kabecenell, A.; De Lombaert, S. "Substituted pyrazole as novel sEH antagonist: Investigation of key binding interactions within the catalytic domain" *Bioorg. Med. Chem. Lett*. **2010**, *20*, 6379-6383.

13. Ingraham, R. H.; Gless, R. D.; Lo. H. Y. "Soluble Epoxide Hydrolase Inhibitors and their Potential for Treatment of Multiple Pathologic Conditions" *Current Medicinal Chemistry*, **2011**, *18 (4)*, 587-603.

14. Lo, H. Y.*; Nemoto, P. A.; Kim, J. M.; Hao, M-H.; Qian, K. C.; Farrow, N. A.; Albaugh, D. R.; Fowler, D. M.; Schneiderman, R. D.; August, E. M.; Martin, L.; Hill-Drzewi, M.; Pullen, S. R.; Takahashi, H.; De Lombaert, S. "Benzimidazolone as Potent Chymase Inhibitor: Modulation of Reactive Metabolites Formation in the Hydrophobic ($P_1$) Region" *Bioorg. Med. Chem. Lett*. **2011**, *21 (15)*, 4533-4539.

15. Lo, H. Y.* *et .al*. "Substituted Pyrazole as Novel sEH Antagonist: Study on the Antihypertensive Effect" *J. Med. Chem*. (pending submission)

## List of Patent Applications

1. WO2004014905: Substituted benzimidazole compounds

2. WO2005079791: Thiophene-2-carboxylic acid-(1H-benzimidazol-2-yl)-amide derivatives and related compounds as inhibitors of the Tec kinase ITK

(interleukin-2-inducible T cell kinase) for the treatment of the inflammation, immunological and allergic disorders

3. WO2007067836: Substituted pyrazole compounds useful as soluble epoxide hydrolase inhibitors

4. WO2008147697: Benzimidazolone chymase inhibitors

5. WO2009023655: Quinazolinedione chymase inhibitors

6. WO2010027762: Indolizine inhibitors of leukotriene production

7. WO2010030500: Aza-benzimidazolone chymase inhibitors

8. WO2011068821: Benzimidazole inhibitors of leukotriene production

9. WO2012024150: Oxadiazole inhibitors of leukotriene production

10. WO2012027322: Oxadiazole inhibitors of leukotriene production

11. WO2012040137: Oxadiazole inhibitors of leukotriene production

12. WO2012061169: Benzimidazole inhibitors of leukotriene production

13. WO2012058254: Benzimidazole inhibitors of leukotriene production

14. WO2013116182: Heterocyclic compounds as inhibitors of leukotriene production

15. WO2013071880: Nitrogen-containing fused ring compounds for use as CRTH2 antagonists

16. WO2014040555: Nitrogen-containing heteroaromatic ring derivative as tyrosine kinase inhibitor

17. WO2014086102: Indole full ketone derivative used as tyrosine kinase inhibitor