

JOHN (YUAN) WANG PH.D.

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Drug Discovery Strategy Leader

Forward-thinking research innovator with substantial all-round experience and notable achievements in drug discovery. Knowledge and management background spans multiple areas of exploration, including oncology, immunology, and, most recently, emerging modalities in neurodegenerative diseases.

Areas of expertise include:

**Medicinal Chemistry | Early Drug Development | Antisense Oligonucleotides (ASO)
Drug Discovery Technologies
Structure / Protein Science & Chemical Biology / Computational Chemistry
Hit Finding (Assay Development, Screening, Compounds)**

CAREER HIGHLIGHTS

- Led and contributed to multiple immune, oncology, and immune oncology projects from earlier discovery to development, including Halaven (approved worldwide), E5531, E5564 (reached Phase III), E6201 (Phase II), H3B-8800, H3B-6527, H3B-6545 (Phase II POC), and E7766.
- Devised and built nimble, target-focused neurodegenerative evaluation system from scratch, employing key talents in structure biology, computational chemistry / artificial intelligence (AI), and assays as well as development team managing high throughput screening (HTS), automation, and compounds.
- Established key assays for 3 neurodegenerative targets in house, collaborating with teams completing 7 HTS screenings in 1.5 years, covering 150K compounds, with 2 out of 3 projects becoming hit to lead and 1 progressing to lead optimization stage.
- Opened extensive collaborations with external academic institutions, including Harvard Medical and Oxford SGC, and with contract research organizations (CRO), generating molecular tool, protein in needs, and solutions to protein structures with or without tool molecules, several of which are being published.
- Worked closely with pharmacology in neuroscience team, successfully moving 2 projects into lead optimization.
- Advised and guided medicinal chemistry team in hit to lead and lead optimization, leveraging deep experience in drug discovery.
- Explored new modalities for target modulations, steering team in tool discovery for developing bispecific antibodies for neuron-immune modulation evaluation of targets and partnering with chemists examining ASO for neurodegenerative targets that were discovered and evaluated.

PROFESSIONAL EXPERIENCE

Eisai Company, Ltd., Cambridge & Andover, MA

Head of Modality Discovery Sciences

2022 - 2024

Deep Human Biology Learning (DHBL) Discovery Evidence Generation (DEG)

Led modality discovery efforts focused on novel drug discovery technologies, including ASO biology, AI-driven computational chemistry, and small molecule ribonucleic acid (RNA) interactions. Managed cross-functional teams covering structure biology, chemical biology, and automation for screening and compound management.

- Integrated new modalities into genetic guided immune-dementia drug discovery platform, enhancing drug pipeline.
- Navigated target discovery to lead stage for Alzheimer's disease immunotherapy, enhancing neurodegenerative disease therapy pipeline.

Executive Director, Head of Discovery Sciences

2018 - 2022

Genomic Guided Dementia Discovery (G2D2)

Oversaw immunodementia drug discovery platform, leading integration of structure biology, assay development, compound screening / management and AI / machine learning (ML) computational chemistry.

- Headed team of researchers across multiple departments, driving advancements in Alzheimer's and neurodegenerative disease treatments.
- Introduced AI / ML techniques for better compound screening, achieving significant reduction in HTS screening time.
- Concluded 1 neurodegenerative target proof of concept (POC) through multiple modalities investigation.

Distinguished Scientist, Head of Target Modulation Engine

2015 - 2018

AiM Institute of Andover

Directed target modulation engine team with responsibility for assay development, screening, computational chemistry, and structure biology supporting drug discovery.

- Spearheaded cross-disciplinary collaborations in immune-oncology (IO) and neurodegenerative disease research, advancing novel targets.
- Revamped screening system with incorporation of cutting-edge AI / ML approaches, increasing efficiency of target identification and validation.
- Discovered and advanced IO target drug candidate, E7766 into clinic.

Vice President (VP), Medicinal Chemistry, H3 Biomedicine Inc., (Wholly Owned by Eisai)

2011 - 2015

Established and grew medicinal chemistry team from scratch, focusing on genetic-guided cancer drug discovery.

- Oversaw discovery and development of 3 clinical-stage candidates, H3B-8800, H3B-6527, and H3B-6545, delivering significant contributions to oncology development with all 3 entering United States clinical trials and H3B-6545 completing POC in Phase II.
- Managed external partnerships with academic institutions and CROs, ensuring seamless drug development processes.
- Patented multiple novel compounds, contributing to Eisai's expanding intellectual property portfolio.

Director of Global Discovery Chemistry in Oncology, Product Creation Unit, Eisai

2009 - 2011

Other Positions Held:

Scientist, Senior Scientist, Principal Scientist, Eisai Research Institute of Boston

ADDITIONAL ADVISORY / LEADERSHIP EXPERIENCE

Shengzhen BayRay Innovation Center, Shengzhen Bay Lab, Shengzhen, CN

Scientific Advisor

Early discovery projects in oncology targets.

EDUCATION

- **Doctor of Philosophy (Ph.D.)**, Organic Chemistry, Harvard University, Cambridge, MA
- Chemistry Graduate Program Fellow, China / US Exchange, Harvard Chemistry Department, Harvard, University, Cambridge, MA
- **Bachelor of Science (B.S.)**, Chemistry, Fudan University, Shanghai, CN

ACADEMIC AWARD

- Top Score, in Chinese National Chemistry Graduate Exams and Awarded CGP Fellowship for Graduate Study in top 25 United States / North American Chemistry Departments

PROFESSIONAL AFFILIATIONS

- Member, American Chemical Society
- Member, American Association of Cancer Research, Past Member, Executive Committee, Chemistry in Cancer Research Working Group
- Co-Chair, 2018 Chemistry to Clinical Education Sessions: Lead Optimization & Novel Chemical Tools and Leads for Unprecedented Targets

PUBLICATIONS & PATENTS

- Details on Publications and Patents can be provided.