

Associate Director, Translational Modeling & Simulation

Job ID
REQ-10085390

8月 07, 2026

USA

Available in: English

摘要

#LI-Hybrid

Internal Title: Associate Director

Location: Cambridge, MA

Novartis is a leader in neuroscience and cardiovascular disease areas with a robust and diverse pipeline of innovative therapies. We are seeking a translational modeler eager to accelerate oligonucleotide therapeutics (xRNA[™]), including antibody-xRNA conjugates, from discovery through clinical translation. In this role, you will partner with multi-disciplinary discovery and preclinical teams to develop and apply model-informed approaches that shape program strategies. As part of a truly translational modeling team, you will also work closely with clinical pharmacology and pharmacometrics groups to support clinical programs, applying quantitative systems pharmacology (QSP) and mechanistic PBPK/PD approaches to inform key decisions from early dose optimization through life-cycle management.

This role reports to a Modeling and Simulation (M&S) team lead within the Pharmacokinetic Sciences

(PKS) M&S team.

About the Role

Key responsibilities:

- Act as the M&S representative on several programs. Develop and execute modeling strategies, contribute to project team discussions, and guide model-informed decisions from therapeutic design to first-in-human dose selection and beyond.
- Build and apply mechanistic models (PK/PD, QSP, and PBPK/PD) that link drug pharmacology, tissue biodistribution, mechanism(s) of action, and downstream effects.
- Integrate modeling into the design and interpretation of preclinical in vivo and in vitro studies to support candidate selection, optimization, and advancement towards the clinic.
- Collaboratively develop platform disease (QSP) and PBPK/PD models that extend across multiple projects and phases of discovery & development.
- Engage in strategic initiatives within M&S, such as creating platform-level translational modeling strategies tofor new platformsthat impact across projects and developing new and modeling workflows (e.g., agentic AI).
- Proactively seek opportunities to increase the understanding and adoption of translational modeling among internal partners and expand the impact and visibility of modeling through external collaborations.
- A modeler at the Associate Director level will have additional mentorship and strategic responsibilities within M&S and will engage in wider platforms and initiatives across Novartis.

Essential requirements

- Ph.D. in biology, bioengineering, pharmaceutical sciences, biophysics, or a related field and 7+ years of industry experience with progressively increasing levels of responsibility.
- General Modeling Skills: Expert level proficiency in core modeling fundamentals is required, including scripting languages (e.g., MATLAB, R), construction of ordinary differential equation (ODE) models, parameter estimation, and data visualization.
- Industry Modeling Skills: Expert level proficiency in pharmacokinetics and pharmacodynamics (PK/PD), quantitative systems pharmacology (QSP), and/or mechanistic physiologically based PK/PD (PBPK/PD) is required. Proficiency in pharmacometrics concepts (Population PK, exposure-response modeling) is preferred.
- Domain Expertise: Prior experience with the integration of computational modeling and biological concepts is required. Role-specific experience in the highlighted disease areas (neuroscience, cardiovascular, metabolism) and drug modalities (oligonucleotides, ADCs) is preferred but not required.
- Collaboration and Communication: Demonstrated ability to communicate modeling results to a multidisciplinary audience for collaborative work and/or to facilitate strategy and decision-making. Fluent in English (oral and written).

This is a hybrid role that requires a balance of in-person and virtual working, with an average of 12 days a month on site in Cambridge, MA.

The salary for this position is expected to range between: \$152,600 and \$283,400 per year.

The final salary offered is determined based on factors like, but not limited to, relevant skills and experience, and upon joining Novartis will be reviewed periodically. Novartis may change the published salary range based on company and market factors. Your compensation will include a performance-based cash incentive and, depending on the level of the role, eligibility to be considered for annual equity awards.

US-based eligible employees will receive a comprehensive benefits package that includes health, life and disability benefits, a 401(k) with company contribution and match, and a variety of other benefits. In addition, employees are eligible for a generous time off package including vacation, personal days, holidays and other leaves.

To learn more about the culture, rewards and benefits we offer our people click [here](#).

Why Novartis: Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients' lives. Ready to create a brighter future together? <https://www.novartis.com/about/strategy/people-and-culture>

Benefits and Rewards: Learn about all the ways we'll help you thrive personally and professionally. [Read our handbook \(PDF 30 MB\)](#)

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Accessibility & Reasonable Accommodations

The Novartis Group of Companies are committed to working with and providing reasonable accommodation to individuals with disabilities. If, because of a medical condition or disability, you need a reasonable accommodation for any part of the application process, or to perform the essential functions of a position, please send an e-mail to us.reasonableaccommodations@novartis.com or call

+1(877)395-2339 and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

部门

Biomedical Research

Business Unit

Research

地点

USA

状态

Massachusetts

站点

Cambridge (USA)

Company / Legal Entity

U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.

Functional Area

Research & Development

Job Type

Full time

Employment Type

Regular

Shift Work

No

var kPlayer = KalturaPlayer55802022 || KalturaPlayer; var config = { targetId:

```

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false }, sources: { options: {}, startTime: 0 }, disableUserCache: "true", plugins: {}, sources: { options:
{}, startTime: 0 }, ui: { showCCButton: false, settings: { showQualityMenu: true, showSpeedMenu:
false }, components: { fullscreen: { disableDoubleClick: false } }, uiComponents: [ { presets:
['Playback', 'Live'], area: 'BottomBarRightControls', replaceComponent: 'Fullscreen', get:
kPlayer.ui.components.Remove } ] } }; // Check and add plugins only if they exist if
(kPlayer.plugins["download"]) { config.plugins.download = { disable: true }; } if
(kPlayer.plugins["transcript"]) { config.plugins["playkit-js-transcript"] = { position: "right", // Default:
bottom;('left', 'right', 'top', 'bottom') to enable transcript. expandMode: "over", // Default:
alongside;('alongside', 'hidden', 'over') expandOnFirstPlay: false, showTime: true, downloadDisabled:
false, printDisabled: false, disable: true }; } if (kPlayer.plugins["preventSeek"]) {
config.plugins.preventSeek = { preventSeekForward: false, preventSeek: false }; }
config.plugins.floating = { disable: true }; if (kPlayer.plugins["navigation"]) { config.plugins.navigation =
{ position: "right", expandMode: "over", expandOnFirstPlay: false, visible: false }; } if
(kPlayer.plugins["hotspots"]) { config.plugins["playkit-js-hotspots"] = { disable: true }; } if
(kPlayer.plugins["moderation"]) { config.plugins["playkit-js-moderation"] = { disable: true }; } if
(kPlayer.plugins["info"]) { config.plugins["playkit-js-info"] = { disable: true }; } if
(kPlayer.plugins["share"]) { config.plugins.share = { disable: true }; } config.ui.uiComponents = []; if
(kPlayer.plugins["googleAnalytics"]) { config.plugins.googleTagManager = {};
config.plugins.googleTagManager.customEventsTracking = {};
config.plugins.googleTagManager.containerId = 'GTM-57RJQ5';
config.plugins.googleTagManager.customEventsTracking.custom = [];
config.plugins.googleTagManager.customEventsTracking = { preset: { coreEvents: true, UIEvents:
false, playlistEvents: false, castEvents: false } }; }

```

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// Ensure the global player registry array always exists, regardless of embed type.
window.kalturaPlayerVideos = window.kalturaPlayerVideos || []; try { var thumbEmbedPromise =
thumbnailEmbed({config, mediaInfo: {entryId: "1dgfvmafo"}}); // thumbnailEmbed() returns a
Promise that resolves with the player instance // when the user clicks the thumbnail. Use .then() to
capture the player directly. thumbEmbedPromise .then(function(player) {
window.kalturaPlayerVideos.push(player); // Notify kalturadatalayer.js that a new player is ready so
it can // attach custom event listeners immediately, regardless of when // the user clicked the
thumbnail relative to page load. document.dispatchEvent(new CustomEvent('kalturaPlayerReady', {
detail: { player: player } })); }) .catch(function(error) { console.error(error); }); } catch (e) {
console.error(e.message) }

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