

Director, Group Head (AI Systems & Scale)

Job ID

REQ-10078244

Jun 03, 2026

LOC_US

About the Role

Step into a leadership role shaping the future of AI at scale, where advanced agentic systems and enterprise AI platforms transform how biomedical research is delivered. As Director & Group Head (AI Systems & Scale), you will drive the design and deployment of next-generation AI systems, enabling scientists to seamlessly leverage data, models, and intelligent workflows to accelerate drug discovery. You will lead high-performing engineering teams, define scalable architectures, and ensure AI solutions are robust, governed, and impactful—bringing innovative therapies closer to patients faster.

Key Responsibilities

- Define and lead the multi-year roadmap for scalable AI systems, platforms, and agentic architectures across research.
- Lead and scale multidisciplinary teams delivering production-grade AI systems and intelligent applications.
- Establish reference architectures for agentic systems, including orchestration, retrieval, memory, and human-in-the-loop controls.
- Build and standardize enterprise agentic platforms with reusable components, workflows, and evaluation frameworks.
- Define and enforce machine learning operations and large language model operations standards across AI systems development.
- Own agent quality and safety engineering, including guardrails, policy enforcement, and failure detection mechanisms.
- Drive scalable deployment strategies, ensuring performance, reliability, cost efficiency, and multi-tenant architecture.
- Define performance metrics linking system effectiveness to scientific outcomes, including accuracy, robustness, and efficiency.
- Partner with data, security, and platform teams to ensure governance, compliance, and responsible data usage.
- Drive cross-functional collaboration and portfolio management to prioritize high-impact AI system initiatives and reduce duplication.

Essential Requirements

- Demonstrated experience leading machine learning capability development initiatives across multiple drug discovery domains and teams.
- Strong experience applying machine learning across functional areas such as computational chemistry or protein modeling.
- Proven expertise in large model training, including high-performance computing, cloud environments, and distributed systems.
- Deep curiosity and passion for biomedical sciences and therapeutic discovery.
- Strong ability to explain complex machine learning concepts clearly to both technical and non-technical stakeholders.
- Minimum of 10+ years of experience in innovation, development, deployment, and support of machine learning solutions.
- Strong coding proficiency in Python and deep learning frameworks, with experience using version control systems.
- Proven ability to manage complexity, align stakeholders, and deliver results in matrixed environments.

Desirable Requirements

- Experience building enterprise-scale agentic platforms with orchestration, memory, and retrieval systems.
- Expertise in machine learning operations and large-scale model deployment with monitoring and drift detection.

Compensation and Benefits

Novartis Compensation and Benefit Summary

The salary for this position is expected to range between 1,94,600.00 - 3,61,400.00 USD Annual.

The final salary offered is determined based on factors such as relevant skills and experience and will be reviewed periodically upon joining Novartis. Novartis may update 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 for annual equity awards.

US-based eligible associates receive a comprehensive benefits package that includes health, life, and disability coverage, a 401(k) plan with company contribution and matching, and a range of additional benefits. Associates are also eligible for a generous time-off package, including vacation, personal days, holidays, and other leave options. To learn more about the culture, rewards and benefits we offer our people [click here](#).

Role Requirements

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 \(PDF 30 MB\)](#)

Division

DIV_RE

Business Unit

Information Technology

Location

LOC_US

Site

Cambridge (USA)

Company / Legal Entity

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

Functional Area

FCT_DD

Job Type

Full time

Employment Type

Regular

Shift Work

No

[Apply to Job](#)

Job ID

REQ-10078244

Director, Group Head (AI Systems & Scale)

[Apply to Job](#)

Source URL: <https://prod1.jobapi.novartis.com.cn/req-10078244-director-group-head-ai-systems-scale>

List of links present in page

1. <https://prod1.jobapi.novartis.com.cn/req-10078244-director-group-head-ai-systems-scale>
2. https://www.novartis.com/sites/novartis_com/files/novartis-life-handbook.pdf

3. <https://www.novartis.com/about/strategy/people-and-culture>
4. https://www.novartis.com/sites/novartis_com/files/novartis-life-handbook.pdf
5. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Director--Group-Head--AI-Systems---Scale-_REQ-10078244
6. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Director--Group-Head--AI-Systems---Scale-_REQ-10078244