PARTNERING WITH INNOVATORS TO TREAT SERIOUS ILLNESS
Amgen business development creates opportunities that leverage our unique capabilities with the innovative technologies and therapies of our partners to deliver life changing therapies for patients with serious illnesses.
Biotechnology Heritage:
A Venture Capital Success Story
Founded in 1980 by a small group of enterprising venture capitalists and scientists who saw the promise of emerging research in genetics, Amgen has since grown to be one of the world’s largest independent biotechnology companies with a rich late-stage pipeline, more than a dozen marketed products, and a global presence. We continue to build expertise and capabilities that make us an attractive partner. A few of these capabilities include human genetics, protein engineering, health technologies, biologics manufacturing, delivery systems, and clinical development.

Balanced Approach:
Sourcing Innovation
At Amgen, we recognize that one of the most important drivers of success is our balanced approach of capturing internal and external innovation. These investments, along with the work we have done at Amgen, have led to significant advances in the treatment of cancer, cardiovascular disease, inflammation, nephrology, bone health, neuroscience, and other serious illnesses. Our success continues to come from cultivating home-grown innovation inside the walls of Amgen while also capturing external innovation and forging valuable partnerships that dramatically enhance how we deliver for patients.

Bespoke Deals:
Flexible And Innovative Deal Structuring
We work with partners in a variety of ways to make the most of innovations that could deliver tangible benefits to those suffering from serious illness. We view every deal as unique and work with partners to achieve mutually beneficial results. We are not confined to pre-defined deal structure. Examples of recent transactions include spin-outs, limited partnership investments, equity investments, collaborations, joint ventures, in- and out-licensing, early-stage partnerships and acquisitions.

Beyond The Deal:
Amgen’s Commitment to Partnership Excellence
As a critical component of Business Development, Alliance Management is responsible for the success of Amgen’s partnerships from deal negotiation through implementation. We use the experience gained from working with hundreds of partners for more than three decades—ranging from research stage technology through multi-billion dollar commercial assets—to optimize the value-capture proposition for both Amgen and our partners. The unique structure of Amgen’s Partnership Management Team ensures that partners have robust and well-defined lines of communication into Amgen’s core functions, which in turn facilitates rapid and effective identification of opportunities to enhance the value of partnerships.
SELECT DEALS AND PARTNERSHIPS

**Acquisitions**
BioVex
deCODE
Five Prime
KAI
Micromet
Nuevolution
Onyx
Otezla
Rodeo

**Companion Diagnostics**
Adaptive
Dako/Agilent
Guardant Health
Illumina
Qiagen
Roche/Ventana
Transgenomic

**Out-Licenses and Spin-Outs**
Akero
AmMax
Atara
Flexus
Jasper
Kartos
Kezar Life Sciences
NextCODE
Vigil Neuroscience
Voravi

**Equity Investments**
Aetion
Acerta
Akili
Alector
Caraway
Epizyme
Flatiron Health
GNS Healthcare
Kymera
Nkarta
Obsidian
Oxford Nanopore
Precision Biosciences
Ribometrix
Science37
Senti Biosciences
Syapse

**Collaborations**
Arrowhead
AstraZeneca
BeiGene
Carmot
CytomX
Entera Bio
Immatics
Kite Pharma
Kyowa Kirin
Massachusetts General Hospital (MGH)
MD Anderson
Novartis
Provention Bio
UCB
Xencor

**Limited Partnership Investments**
Atlas Ventures
Decheng Capital
Orbimed Israel
Redmile Group
venBio

**Academic Partnerships**
Broad Institute
Caltech
Mila - Quebec AI Institute
MIT
UCLA
UCSF
University of Washington - Institute for Protein Designs
USC

**Regional Partnerships**
AmoyDx
Astellas
Consortium Québécois sur la Découverte du Médicament (CQDM)
Daichi Sankyo
Dr. Reddy’s
Kyowa Kirin
Ono
Takeda
FULLY INTEGRATED BIOTECHNOLOGY ORGANIZATION

From human genetics and target validation to discovery and development to reaching patients globally, Amgen can leverage innovation at virtually every stage in the process of getting a medicine to market.

"Biology First" Advantage
Amgen's approach to drug discovery starts with seeking to understand the fundamental mechanisms of a disease and then using our expertise across multiple modalities to develop the appropriate protein, antibody, small molecule, peptide or other modality necessary to hit a disease target. This agnostic approach—and deep internal knowledge of how diseases work—makes Amgen positioned to see the value of innovations from potential partners.

Unique Strength In Protein Engineering
Modifying protein structures to optimize a biologic medicine is a complex process. Amgen has industry-leading expertise in this area to potentially improve innovations conceived both inside and outside the company.

Trial Experience
Amgen has extensive experience in conducting large-scale clinical trials—which have included nearly 30,000 patients and 20 trials for a single investigational medicine.

Leading Biologics Manufacturing Capability
With more than three decades of experience and a record of reliably supplying medicines to patients, Amgen is recognized worldwide as a leader in manufacturing complex biologic therapies.

Successful Launch Track Record
Amgen has extensive experience launching products into existing therapeutic areas—and new ones.

Commercial Infrastructure To Bring Medicines To Market Globally
Once Amgen medicines and health technology have been approved, we have the potential to bring them to patients on a global scale.
Delivering More Value Through Health Technology

Innovation that goes “beyond the molecule” may allow us to get even closer to solving the most complex challenges that people encounter in healthcare. Amgen is harnessing our world-class capabilities to deliver more value to those we serve – providing better care and a better patient experience through integration of novel health technologies with our molecules. These technologies include diagnostics, drug formulations, delivery devices and digital health tools.

While Amgen brings considerable expertise and experience to this undertaking, we know we will need an open approach to innovation to achieve our aspirations. That’s why we are forming collaborative relationships with leading academic and medical institutions, technology companies, healthcare professionals and patients to ensure that we understand and address root causes of challenges at every stage in healthcare.

Platforms And Technologies

<table>
<thead>
<tr>
<th>Drug discovery platforms</th>
<th>Next-generation modalities</th>
<th>Gene-editing technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient stratification and predictive biomarkers</td>
<td>Protein/peptide formulation technologies and delivery devices</td>
<td>Digital health technologies</td>
</tr>
<tr>
<td>Imaging platforms</td>
<td>Proprietary research tools and tissue access</td>
<td>• Patient identification</td>
</tr>
<tr>
<td>Immunotherapy platforms</td>
<td>Manufacturing technologies</td>
<td>• Clinical trial enrollment and completion</td>
</tr>
<tr>
<td>Conjugation and protein engineering</td>
<td>Companion diagnostics</td>
<td>• Predictive modeling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Real-world data analysis and insights</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Clinical decision support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Patient adherence</td>
</tr>
</tbody>
</table>
ABOUT AMGEN VENTURES
Since 2004, Amgen Ventures has invested in emerging companies to advance promising medicines and technology that could ultimately make a difference for patients suffering from serious illnesses.

WORKING WITH AMGEN VENTURES
In addition to capital, Amgen has the ability to provide innovators with access to deep expertise and strategic insights.

• Technical expertise across multiple modalities to develop the appropriate protein, antibody, small molecule or peptide
• Strong biological understanding and translational research
• Extensive experience conducting large-scale clinical trials
• Deep knowledge of biologics manufacturing
• Successful track record for launching medicines
• Commercial infrastructure to bring medicines to market globally
AMGEN’S BUSINESS DEVELOPMENT SENIOR LEADERSHIP TEAM

Dave Piacquad
Senior Vice President
Business Development

Jessica Droge
Ph.D., Vice President
External R&D

Rachna Khosla
Vice President
Business Development

Chris Urban
Vice President
Alliance and Integration Management

Janis Naeve
Ph.D., Managing Director
Amgen Ventures

Nate Russell
Executive Director
Corporate Strategy

Omari Wise
Executive Director
Transactions Analytics

Tara Pabst Marra
Director
Strategic Planning and Operations

MEET THE FULL BUSINESS DEVELOPMENT TEAM AT:
https://amgenbd.com/s/about-us
PARTNERSHIPS
Interested in partnering with Amgen?

CONTACT US ONLINE:
For more information or to submit your partnership opportunities please visit amgenbd.com

CONTACT US BY MAIL:
Amgen Inc
One Amgen Center Drive
Thousand Oaks, CA 91320-1799
www.amgen.com

© 2018 Amgen Inc. All rights reserved. June 2021