Abbott
A Promise for Life

Turning Science Into Caring

through collaborations

Global Pharmaceutical Research and Development

AREAS OF INTEREST

Abbott
A Promise for Life

PIONEERING

ACHIEVING

CARING

ENDURING

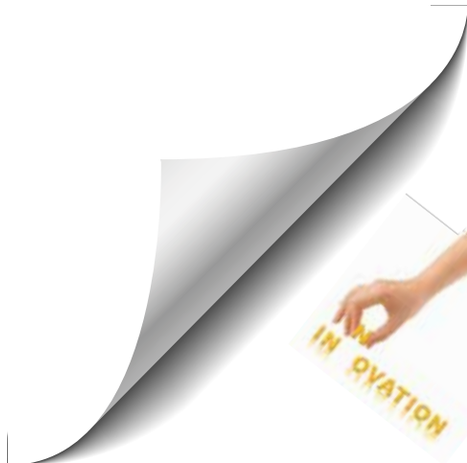
OUR STORY

Abbott is a global, broad-based health care company devoted to discovering new medicines, new technologies, and new ways to manage health. For more than 120 years, Abbott has been focused on finding innovative ways to address the full range of health care needs, from disease prevention and diagnosis to treatment and cure. It is part of our heritage, and it continues to drive our work.

Today, approximately 90,000 employees around the world share this passion for Turning Science Into Caring. We are here for the people we serve in their pursuit of healthy lives. This has been the way of Abbott — passionately and thoughtfully translating science into lasting contributions to health.

As a global, broad-based health care company, we build upon our internal scientific expertise by developing strong collaborative relationships with partners to bring new products to market. Our work, which extends across multiple lines of business, gives us a wealth of knowledge, understanding and capabilities in a number of health care areas.

For further information, please visit www.abbott.com.



Jim Sullivan, Ph.D.
Vice President, Discovery
Global Pharmaceutical R&D

John M. Leonard, M.D.
Senior Vice President, Pharmaceutical R&D
Global Pharmaceutical R&D

Dear Colleague:

At Abbott, we've built our pharmaceutical business on innovative science. We have a history of bringing together the right people and the right ideas to fuel our pipeline. That's where you come in. We are actively seeking research partners to join us in true collaboration: combining our strengths for mutual success and shared growth. As your partner, we are dedicated to fully understanding the science behind your invention and working to advance it to serve patient needs. Whether you are in academia, a nonprofit organization, a start-up biotech, a financial organization, or a small- to medium-sized pharmaceutical company, we are prepared to work with you.

As a research partner, our core strengths are:

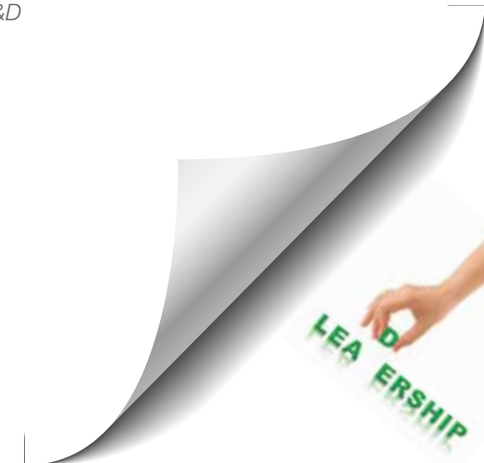
- *Global organization with integrated capabilities from discovery to market*
- *Dedicated partner with discovery, development and commercial expertise to help your science reach its maximum potential*
- *Well-positioned ally to advance your invention or technology across our diverse business lines — pharmaceuticals, diagnostics and medical devices — to meet current and future patient and physician needs*
- *Committed to building sustainable, long-term relationships, while maintaining transparency and responsiveness with all collaborative partners*

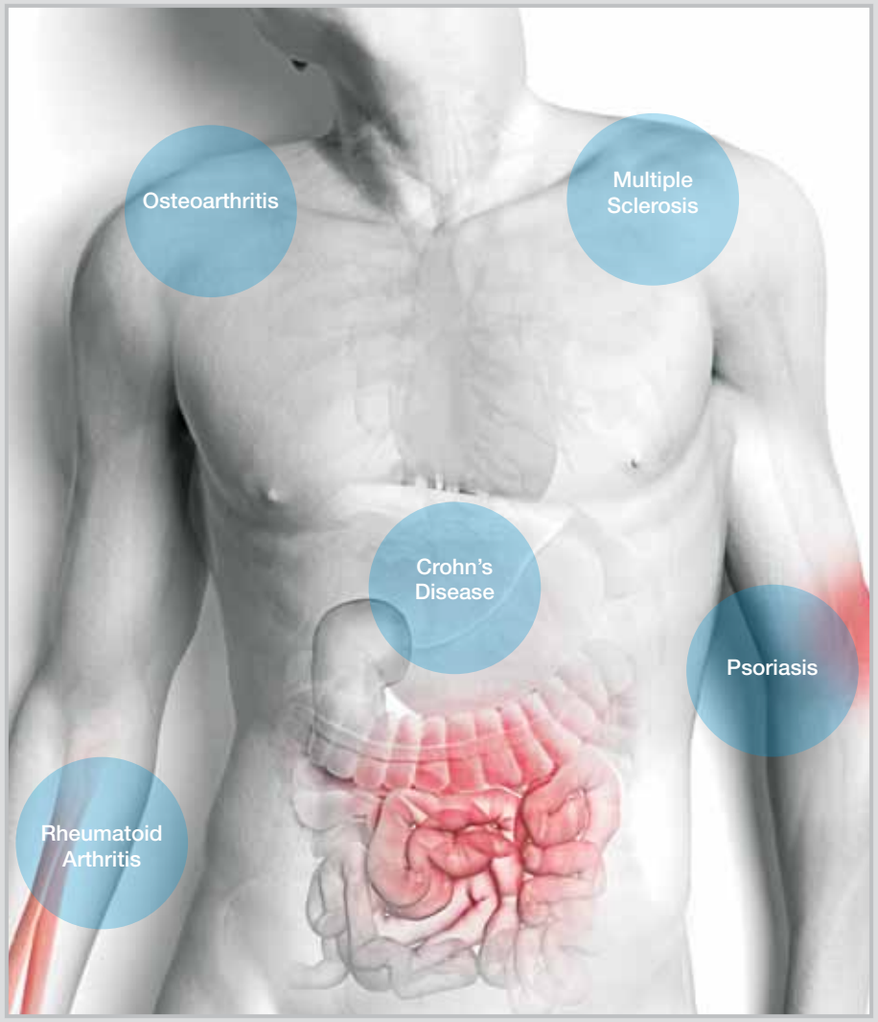
Our Global External Research team is actively seeking domestic and global scientific opportunities in the areas of discovery research, targets and technologies. This booklet will give you an overview of our focus areas in science and technology. Whether it is in basic research advances, novel targets, enabling technologies or compounds, we look forward to collaborating with you and invite you to contact us.

Sincerely,

Jim Sullivan, Ph.D.
Vice President, Discovery
Global Pharmaceutical R&D

John M. Leonard, M.D.
Senior Vice President, Pharmaceutical R&D
Global Pharmaceutical R&D





Abbott is building on the success of its biologic therapeutics through research on novel treatments for chronic inflammatory disease. We have proven capabilities, from early discovery to late-stage development, with both small molecules and antibody therapeutics across a variety of immune-related disorders. We are particularly seeking collaborative opportunities in innovative science for the following areas of research:

IMMUNOLOGY

Rheumatoid arthritis

- Novel targets and mechanisms addressing inflammation, pain and bone degeneration in arthritic joints
- Novel small-molecule and antibody-based disease-modifying therapeutics
- Unique and predictive biomarkers of disease progression and response to therapy
- Novel preclinical disease models for rheumatoid arthritis

Osteoarthritis

- Novel targets and pathways involved in osteoarthritis pathogenesis, with a particular emphasis on pathways affecting cartilage repair or protection of cartilage degeneration
- Preclinical and clinical biomarkers for early diagnosis that predict disease progression
- Early-stage therapeutic approaches for disease modification
- Technologies, formulations and expertise in sustained, intra-articular delivery of therapeutics

Multiple sclerosis

- Disease-modifying and symptomatic therapeutics for multiple sclerosis (MS)
- Mechanisms and novel targets that are involved in the inflammatory response or that promote neuroprotection

Areas of secondary research

- Psoriasis
- Crohn's disease
- Systemic lupus erythematosus (SLE)

Abbott is building a neuroscience pipeline of innovative treatments for an array of disorders that impact millions of patients worldwide, such as Alzheimer's disease and schizophrenia. We are also pursuing novel approaches that could provide relief across a broad spectrum of pain states, such as osteoarthritis and postoperative, neuropathic and cancer pain.

NEUROSCIENCE

In these areas, we are seeking breakthrough scientific opportunities, approaches and technologies, including but not limited to the following:

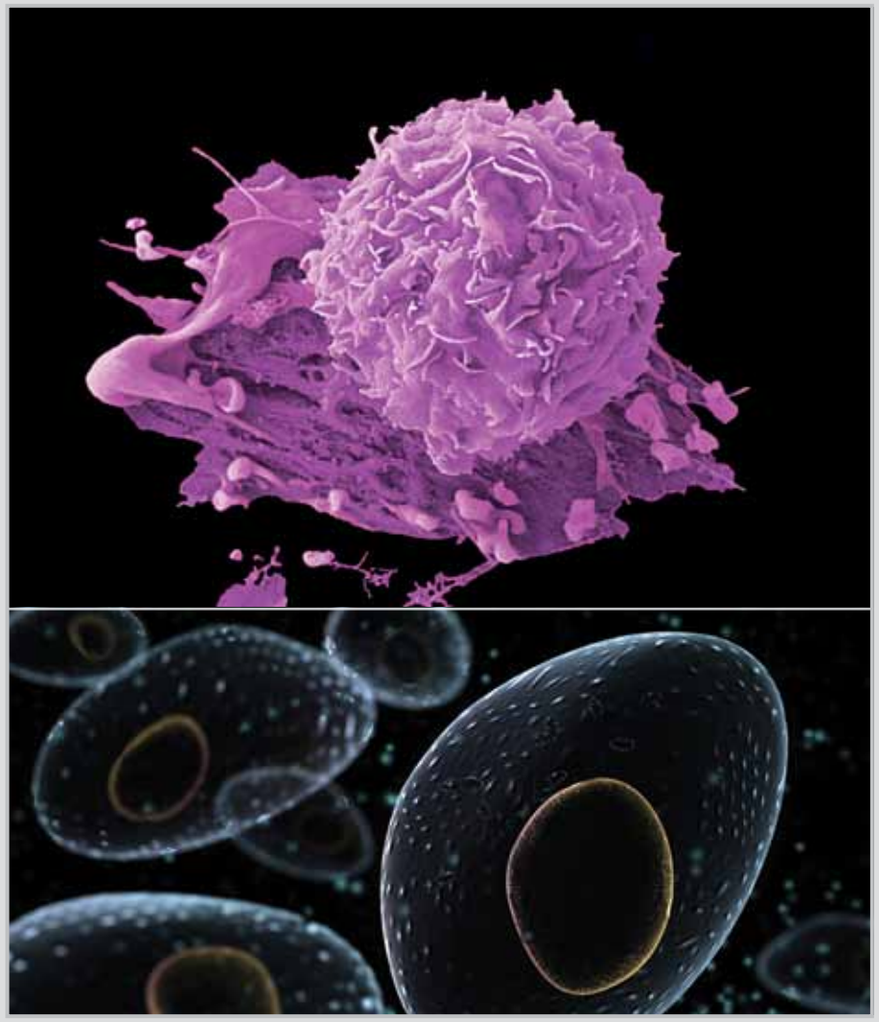
- Novel neuroregenerative mechanisms and pathways (e.g., related to inflammatory mechanisms, epigenetics, metabolic or mitochondrial dysregulation, protein misfolding, miRNA, or neurogenesis)
- Mechanisms and interventions targeting reversal of neurodegenerative disease progression
- Mechanisms that enhance impaired neurotransmission processes
- Neurodevelopmental mechanisms relevant to psychotic disorders
- Novel therapeutic approaches targeting cognitive deficits in schizophrenia

Specific to pain therapeutics, we are also seeking collaboration opportunities in the following areas:

- Novel neuronal and inflammatory pain mechanisms targeting central sensitization, descending inhibition, synaptic plasticity or peripheral sensitization
- Novel compounds with an improved efficacy/safety profile compared to current analgesics for the treatment of moderate and severe chronic pain states, including osteoarthritis, nociceptive, neuropathic and cancer pain
- Preclinical chronic pain models that assess spontaneous or nonevoked physiological endpoints
- Experimental models of pain useful for preclinical to clinical translational studies of novel analgesic mechanisms

In addition, we are searching for novel tools and technologies that can enable clinical decisions, allow better translation of preclinical information to the clinical studies, and facilitate new target identification:

- Diagnostic, prognostic and progression biomarkers, including serum and CSF markers relevant to neurodegenerative diseases (e.g., Alzheimer's disease), potentially including assay validation
- Imaging tools, ligands and techniques
- Technologies that facilitate/enhance transfer of small molecules and biologics across the blood-brain barrier
- Novel preclinical disease models relevant to psychiatric and neurodegenerative diseases



Abbott has a diverse portfolio of preclinical and clinical oncology programs that target pathways involved in apoptosis, angiogenesis, cell growth, DNA repair and cell-cycle regulation. Abbott has proven capabilities in antibody-based therapeutics and is recognized as a leader in the discovery and development of drugs that inhibit anti-apoptotic proteins that allow tumors to escape normal programmed cell death. We are particularly interested in the following:

ONCOLOGY

Novel targets

- Tumor cell proliferation, survival and energy utilization
- Developmental pathways, epigenetics and modulation of gene expression
- Tumor-host interactions, particularly immunomodulation with targets amenable to small-molecule or biologics therapy
- Stromal targets in the tumor microenvironment, including vascular modulation
- Antibody targets: tumor-specific antigens secreted or expressed on the cell surface of tumor or stromal cell antigens
- Competitive early-phase small molecules or biologics

Tools and technologies

- Antibody-enabling technologies (e.g., targeting, delivery, potency enhancement)
- Novel imaging and biomarker technologies
- Access to annotated tumor samples
- Preclinical disease models

Diabetic nephropathy (DN) is a progressive kidney disease caused by long-standing diabetes mellitus (type 1 or 2) and is a prime risk for dialysis in end-stage renal failure and kidney transplantation. Abbott has a focused portfolio of preclinical and clinical programs that target underlying pathologies involved in diabetic nephropathy. Acute kidney injury (AKI) is defined by a rapid decline in kidney function and can be caused by a number of causes (e.g., ischemia, toxins). We are particularly interested in the following areas of renal research:

RENAL DISEASES

Diabetic nephropathy

- Novel targets and/or pathways related to glomerular injury, inflammatory tubular processes and resulting fibrosis in the pathology of DN
- Novel small-molecule and antibody-based therapeutic approaches capable of slowing, preventing or regressing the disease process
- Translational biomarkers that enable measurement of disease progression and/or modulation of underlying pathologies
- In vitro and in vivo models that can provide mechanistic proof of disease-modifying approaches and predictive preclinical disease models

Acute kidney failure

- Novel targets and/or biological pathways related to underlying pathologies
- Novel small-molecule and antibody-based therapeutics aimed at restoration of normal renal function in the setting of AKI
- Predictive models for AKI (both in vitro and in vivo)

OTHER AREAS

As opportunities arise, we continue to leverage breakthrough science and innovative technology to develop treatments and solve unmet medical needs in additional disease areas, such as atherosclerosis and ophthalmology. Across these areas, we are seeking biological platforms and technologies, including but not limited to the following:

- Mechanisms that address cell injury and repair
- Mechanisms and interventions targeting reversal of disease progression
- Immunomodulatory mechanisms related to disease state
- Novel mechanisms that favorably influence vascular elements

Abbott is an industry leader in the biologic therapeutics field, with experience in a broad range of disease areas and diagnostics development. We have extensive capabilities in antibody-based therapeutics discovery and development, focusing on both circulating and cell-surface targets. We are seeking complementary technologies to enrich our portfolio and to enhance existing technology platforms in areas of chronic inflammatory disease, immunosuppression, neuroscience, cancer, and cardiovascular and renal disease.

BIOLOGICS

Progressive proteomics

- Enabling technologies in the design, engineering and development of biological therapeutics and diagnostics
- Predictive bioinformatics tools for design of optimal antibody-based therapeutics
- Rapid-screening techniques for optimizing protein stability
- In vitro prediction systems for detecting antigenicity

Protein production and characterization

- High-throughput systems for protein expression, characterization and stability
- Model GMP-amenable systems for protein production in development-stage projects

Formulation and delivery technology

- Innovative formulation and delivery platforms, with a focus on technologies for local and sustained release of antibodies

Abbott has created one of the most innovative and highly integrated advanced technology engines in the pharmaceutical industry. This area provides cutting-edge, enabling technology support for all of our drug discovery research programs. Abbott continually strives to identify novel, external breakthrough opportunities that can be applied to enhance the quality, effectiveness and productivity of our research.

ENABLING TECHNOLOGIES

Medicinal chemistry

- Flow chemistry, combined on-chip synthesis and bioassay paradigms, new synthetic methodologies to allow production of structurally unique and drug-like molecules, and novel lead-generation technologies

Lead discovery

- Improved screening strategies for allosteric modulators of receptors, ion channels and other membrane-bound drug targets

Imaging and translational biomarkers

- Novel biomarkers that are predictive of therapeutic efficacy in humans
- New molecular imaging approaches and contrast agents
- High-sensitivity detection methods for proteins and peptides in biological fluids

Toxicology

- In vitro and in vivo models that are predictive of human toxicity (e.g., idiosyncratic liver toxicity, teratogenicity and drug metabolism)
- Biochemical and molecular approaches to identify off-target interactions
- Novel biomarkers for toxicity across organ systems

Structural biology

- Technologies that would enable structural characterization of ligand interactions with membrane-bound proteins

Pharmacogenetics

- Genetic variants associated with disease risk, drug response or pharmacokinetics

Drug metabolism and pharmacokinetics

- Novel approaches to early PK/PD data modeling and scaling to human

Drug delivery and formulation technologies

- Small-molecule gastrointestinal (GI) delivery, including gastric retention and targeted regional delivery
- Technologies to enable delivery of poorly soluble compounds (e.g., nanotechnology, amorphous solid dispersions, and novel excipients to enable solubilization and/or intestinal permeability enhancement)
- Technologies to enable local delivery of monoclonal antibodies (mAbs)
- Oral delivery of peptides and proteins
- Novel injection-device technologies for subcutaneous and intradermal administration
- Pediatric/geriatric formulation technologies (e.g., taste assessment and taste-masking technologies)
- Novel depot formulation technologies
- Abuse-deterrent formulation approaches
- Bioabsorbable implants

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GLOBAL EXTERNAL RESEARCH

Scientific Scouting Team

Murali Gopalakrishnan, Ph.D.
Global Contact
murali.gopalakrishnan@abbott.com

William Kohlbrenner, Ph.D.
Global Contact
william.kohlbrenner@abbott.com

Charles Kunsch, Ph.D.
U.S. (East Coast)
charles.kunsch@abbott.com

Daryl Sauer, Ph.D.
U.S. (Midwest)
daryl.r.sauer@abbott.com

Neela Patel, Ph.D.
U.S. (West Coast)
neela.patel@abbott.com

Dieter Ziegler, Ph.D.
Europe
dieter.ziegler@abbott.com

Bin Li, Ph.D.
Asia
dr.binli@abbott.com

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