

TITLE	AREA OF STUDY	INSTITUTION
Hathaway Brown Space Flight Experiment PEACE (Polymer Erosion and Contamination Experiment), a Materials Evaluation Project in Space	Spaceflight	NASA Glenn Research Center and Hathaway Brown School
Research on the Receptor for Oxytocin, the Hormone Responsible for Uterine Contractions, Toward the Goal of Preventing Premature Labor	Medicine	CASE School of Medicine
Hyperglycemia Induces Oxidative Stress and Caspase Activity	Diabetic Retinopathy	CASE School of Medicine
Research Into Apoptosis, a Natural Cell Suicide Process, in Order to Find a Mechanism by Which to Use a Controlled Version of This Process to Eliminate Diseased Cells	Apoptosis	CASE School of Medicine
Cosmic Microwave Background Research and Website	Astrophysics	Case Western Reserve University
Theoretical and Mathematical Studies of Black Holes and the Origin of the Universe	Astrophysics	Case Western Reserve University
Deletion Analysis of Human Monocyte Chemoattractant Protein 3 (hMCP-3) Promoter in Human Astrocytoma Cells	Neuroscience Research (MS)	Cleveland Clinic
A Comparison of Primary DNA Sequence Between the X Chromosome and Chromosome Four	Human Genome Project	CASE School of Medicine
BioMEMS: Medical Applications of Microelectromechanical Systems Technology	BioMEMS Technology	Cleveland Clinic
Research at the Molecular Level into a New Chemical Process that will Result in an Improved, Cost-Effective, Environmentally Friendly Manner in Which to Manufacture Easily Recyclable Paper	Chemical Engineering	Case Western Reserve University
The Significance of B-Tubulin for Left Ventricle Hypertrophy in the Human Heart	Cardiology Research	Cleveland Clinic
Clinical Research into the Effect of Head Trauma in Young Children on Siblings and Family Relationships	Epidemiology	CASE School of Nursing

Kangaroo Care: Can Skin to Skin Contact Replace High Tech Equipment for Premature Babies?	Epidemiology	CASE School of Nursing
The Role of Prothymosin Alpha in Estrogen Mediated MCF7 Breast Cancer Cells	Pharmacology	CASE School of Medicine
Studies Relating Hypertension, Obesity, and Kidney Disease to Nutrition and Genetics	Nutrition/Medicine	CASE School of Medicine
I: Studies in Architecture with Van Dijk, Pace, and Westlake	Architecture	van Dijk, Pace and Westlake Architects
Structure of Mitral Heart Valve Elastin	Biomedical Engineering	Cleveland Clinic
Identifying NRAMP (metal transporter) Proteins from the Cystic Fibrosis Pathogen Burkholderia Cepacia	Pharmacology Related to CF	CASE School of Medicine
Space Flight Project PEACE Polymers on MISSE: Materials International Space Station Experiment (launched August, 2001 on STS-105)	Spaceflight/Materials Science	NASA Glenn Research Center and Hathaway Brown School
Weakly Interacting Massive Particles (WIMPs) (Dark Matter & Detection, Halo Models, Etc.)	Astrophysics	Case Western Reserve University
The Relationship Between Obesity, Hypertension and Kidney Disease: A Lab Internship Experience	Nutrition	CASE School of Medicine
Characterization of Engineered Fibers Using Raman Spectroscopy and AFM	Chemistry	Case Western Reserve University
A Fractal Analysis of Metal Aggregation	Chemistry	Case Western Reserve University
The Development of a Micro-Sensor System for Detecting and Controlling Sulfur Dioxide Emissions	Chemical Engineering	Case Western Reserve University
Understanding Wildfires: A Study in Wood Pyrolysis and Fire Spreading Rates	Materials Engineering	Case Western Reserve University

I: Studies in Architecture with Van Dijk, Pace, and Westlake	Architecture Internship	van Dijk, Pace and Westlake Architects
Research into Vitamin D Deficiency in African-American Infants as a Function of Mother/Child Nutrition and Cleveland Climate	Epidemiology	Cleveland Clinic
PCR Based Deletions of the Ferritin Gene	Biochemistry	John Carroll University
Studies in Art Conservation Utilizing Analytical Techniques	Art Conservation	Cleveland Museum of Art
The Determination of the Amino Acid Sequence of p-80 Coilin in Rat Toward the Goal of Finding the Function of the Coilin Protein	Genetics	CASE School of Medicine
I: An Internship Experience in the Heart Disease Research Lab	Internship- Cardiology Research	Cleveland Clinic
Osseointegration of Preformed Craniofacial Implants	Reconstructive Surgery	University Hospitals
The Purification of the Vassopressin V1-Vascular Receptor Fragment BAM H1, 6H	Genetics	CASE School of Medicine
Studies Relating Cellular and Anatomical Studies of the Heart to the Prevention of Mitral Valve Failure	Biomedical Engineering	The Cleveland Clinic
Fracture Toughness of Gamma Radiation Sterilizes Cortical Bone Allografts	Mechanical Engineering/Materials Science	Case Western Reserve University
Wear and Oxidative Degradation of Ultra High Molecular Weight Polyethylene Components in Total Hip Replacements	Mechanical Engineering/Materials Science	Case Western Reserve University
Schooled in Architecture: Designing a Daycare Center	Architecture	City Architects
Doan Brook Watershed Studies Including an Evaluation of the Health of the System as a Function of Aquatic Insect Population and Vegetation Degradation	Environmental Biology	John Carroll University

Infectious Disease Studies Toward the Goal of Developing a Surveillance System of Antibiotic Resistance as a Function of Geography	Epidemiology	Cleveland Clinic
Archeological Research of Northern Ohio: 1200 A.D.	Archaeology	Cleveland Museum of Natural History
I: An Internship at WMMS	Internship- Radio	Clear Channels WMMS and WMJI
I: Using Skills Acquired at our Respective Internships to Plan and Implement a Benefit Concert for Charity	Service Learning	Hathaway Brown School
Cellular Composition of the Mitral Valve as Related to Phenotypic Expression of Disease	Biomedical Engineering	Cleveland Clinic
A Microelectrochemical sensor to Monitor and Regulate Chlorine and Bromine in Residential Pool or Spa	Chemical Engineering	Case Western Reserve University
Researching a Cure for Breast Cancer by Studying How to Regulate the Estrogen Receptor	Pharmacology	CASE School of Medicine
Using Proteomics to Characterize How Cells Adapt to Oxidative Stress	Proteomics	Cleveland Clinic
Design and Testing of a Phosphoric Acid Gel Electrolyte for a Hydrogen-Oxygen Fuel Cell	Fuel Cells	Case Western Reserve University
I: Architecture and Civil Engineering: An Internship Experience Focusing on the Hathaway Brown Construction Project	Architecture Internship	van Dijk, Pace and Westlake Architects
Detecting New Forms of Matter in the Halo of Our Galaxy	Astrophysics	Case Western Reserve University
Detection of In Vivo Astrocyte Responses to Monocyte Chemoattractant Protein 1 (MCP-1)/CCL2 in the Absence of CC Chemokine Receptor 2 (CCR2)	Neuroscience Research (MS)	Cleveland Clinic

Comparative Anatomy of Heart Valves from Animals with Varying Activity Levels	Biomedical Engineering	Cleveland Clinic
I: Sports Management, Event Planning and Promotion: Interning at IMG	Internship in Sports Management	IMG, Inc.
Using Skills Acquired at our Respective Internships to Plan and Implement a Benefit Concert for Charity	Service Learning	Hathaway Brown School
Comparative Anatomy of Heart Valves in Sedentary and Active Animals	Biomedical Engineering	Cleveland Clinic
Growth of Adult Stem Cells on Microtextured Surfaces for Application in Bone Tissue Engineering Constructs	BioMEMS- Biological Nanotechnology	Cleveland Clinic
Does Changing Water Chemistry Influence Mosquito Populations? Implications for West Nile Virus in Northeast Ohio	Environmental Biology	Cleveland Museum of Natural History
Neurological Research into Brain Attack (Stroke)	Neuroscience	CASE School of Medicine
Invention of an Automated Micro-electrochemical Sensor and Electroplating System to Detect and Remove Metallic Industrial Pollutants from Water	Chemical Engineering	Case Western Reserve University
I: An Entrepreneurial Internship in Medical Engineering	Business	BIOMEC., Inc.
I: An Internship in Advertising	Advertising Internship	Doner Advertising
Researching a Cure for Breast Cancer by Studying How to Regulate the Estrogen Receptor	Pharmacology	CASE School of Medicine
Breast Cancer: Antiestrogen Role of Quinone Reductase and Nythryosine Alpha	Pharmacology	CASE School of Medicine
The Role of Quinone Reductase in Breast Cancer Proliferation	Pharmacology	CASE School of Medicine

Annexin VI and Sodium Calcium Exchanger in the Human Heart and Mouse Model	Cardiology Research	Cleveland Clinic
Studies at the Cellular Level to Determine Interrelationships Between and Subsequent Preventive Measures for Kidney Diseases, Hypertension, Obesity, Diet, Heart Disease, and Heredity	Medicine	CASE School of Medicine
The Effect of Low Intensity Exercise on the Recovery Process of Acutely Ill Elderly Patients	Epidemiology	CASE School of Nursing
Inquiry into the Regulation of Ferritin: The Deletion of a Potentially Critical Sequence of DNA	Biochemistry	John Carroll University
Virology Research with Emphasis on the Herpes Virus	Virology	Cleveland Clinic
Evaluation of a More Effective Technique to Culture Anaerobes	Bacteriology	Cleveland Clinic
The Effect of a Cognitive-Behavioral Intervention on Adherence to HIV Medication and Relation of Physical, Psychological and Demographic Variables to Adherence	Epidemiology	Cleveland Clinic
A Study in FES (Functional Electrical Stimulation) for Treatment of Spinal Cord Injury Related Paralysis	Engineering: Functional Electrical Stimulation (FES)	CASE, MetroHealth Medical Center, & Cleveland VA Hospital
Identification of Functionally Important Domains of Human U4atac Small Nuclear RNA Using an in vivo Genetic Suppression Assay	Microbiology	Cleveland Clinic
An Investigation into the Pathology of Prion Disease	Prion Disease	CASE School of Medicine
DNA Repair as Related to Hematology/Oncology	Hematology/Oncology	CASE School of Medicine
Twintron Research: The Splicing of Large Intron Sequences	Microbiology	Cleveland Clinic

A Shadowing Experience in Orthopedic Surgery and Sports Rehabilitation Medicine	Orthopaedic Surgery	Cleveland Clinic
An Internship in Sports Medicine Training	Sports Medicine	Hathaway Brown School
Failure Analysis as Applied to MEMS (Microelectromechanical Systems)	Nanotechnology Engineering	Case Western Reserve University
Detecting New Forms of Matter in the Halo of Our Galaxy	Astrophysics	Case Western Reserve University
I: Engineering Internship	Engineering Internship	Ralph Tyler & Companies
The Study of Mechanical Properties of Natural Materials Such as Shells	Mechanical Engineering	Case Western Reserve University
Theorema Aureum, Quadratic Reciprocity (Theoretical Mathematics)	Mathematics	Ohio State University Ross Math Program
The Reagan Revolution: Economic or Political?	Economics	National City Investments and Hathaway Brown School
Secretion of Neuronal Growth Factors from Vascular Endothelium	Medicine/ Neuroscience	MetroHealth Medical Center
PCR Based Deletions of the Ferritin Gene	Biochemistry	John Carroll University
I: An Internship in Surgical Anesthesiology	Internship- Anesthesiology	Cleveland Clinic
I: An Internship in Organ Procurement for Surgical Transplantation	Internship- Organ Procurement	LifeBanc Inc.
MEMS (Microelectrical Mechanical Systems)	Nanotechnology Engineering	Case Western Reserve University
North Carolina Macular Dystrophy: Clinical Spectrum and Exclusion of Candidate Genes	Genetics/Eye Disease	Cleveland Clinic
Research into the Occurrence of Alzheimer's Disease	Epidemiology	University Hospitals Alzheimer Center

I: The Architectural Design of a House; an Internship in Architecture	Architecture Internship	Blunden, Barclay, Robbie Associates Architects Incorporated
Relationship Between a History of Systemic Allergic Reactions and Risk of Subsequent Carboplatin Hypersensitivity	Epidemiology	Cleveland Clinic
Investigation of the Effectiveness of Serotonin-receptor Antagonist Antimetic Therapy Over Successive Courses of Carboplatin-based Chemotherapy Treatment	Epidemiology	Cleveland Clinic
The Study of RNA-RNA Splicing in Vivo	Microbiology	Cleveland Clinic
The Effect of Low Intensity Exercise on the Recovery Process of Acutely Ill Elderly Patients	Epidemiology	CASE School of Nursing
Neurological Research into Brain Attack (Stroke)	Neuroscience	CASE School of Medicine
Role of ATP in Secretion of Protein from Vascular Endothelium	Medicine/ Neuroscience	MetroHealth Medical Center
Road Salt Dispersal into the Environment	Environmental Science	Case Western Reserve University
Oxygen Isotope (O16/O18) Mapping and Analysis of Antarctic Ice	Geochemistry	Case Western Reserve University
The Biomechanics of Chordal Rupture in Mitral Valves	Biomedical Engineering	Cleveland Clinic
Mitral Valve Mapping: A New Technique in Structural Analysis	Biomedical Engineering	Cleveland Clinic
The Development of an Improved Artificial Mitral Heart Valve	Medicine/Biomedical Engineering	Cleveland Clinic
I: The History of Design, Marketing, and Retail: An Internship at Macaroni	Retail Internship	Macaroni Children's Clothing Store
I: An Internship at the Shannon Rodgers and Jerry Silverman School of Fashion Design and Photography at Kent State University	Photography Internship	Kent State University School of Fashion Design

Rational Design for External Neural Stimulation	Chemistry	Case Western Reserve University
I: An Internship in Film at The Cleveland Film Society	Internship- Film	Cleveland Film Society
I: An Internship in Film Production: The Making of a CD-ROM for Hathaway Brown's 125 Anniversary	Internship- Film	History Enterprises
The Role of Phosphoglyceratemutase Isoforms in Carbon Metabolism and Growth of Salmonella enterica Serovar Typhimurium	Pharmacology	CASE School of Medicine
A Comparative Study of the Transformation and Expression of the MAK21 Gene	Hematology/Oncology	CASE School of Medicine
Research on Prion Disease, Such as Mad Cow Disease	Prion Disease	CASE School of Medicine
A Shadowing Experience in Equine Veterinary Medicine	Veterinary Medicine	Lake Equine Assoc., Inc.
Developing a Microsensor Array for the Detection of Glucose and Ketone Levels in Diabetics	Chemical Engineering	Case Western Reserve University
Alcoholic Liver Disease: How is TNF Alpha Transcription Affected by Alcohol?	Nutrition/Alcohol	CASE School of Medicine
Neuroscience Research Related to Multiple Sclerosis	Neuroscience Research (MS)	Cleveland Clinic
The Isolation of cis-[PtCl(NH <sub>3</sub> ) <sub>2</sub> (H <sub>2</sub> O)(ClO <sub>4</sub> ), an Anti-Tumor Drug, Using Liquid Chromatography	Chemistry	Case Western Reserve University
Microbiology: A Study of Bacteria and Antibiotic Resistance	Bacteriology	Cleveland Clinic
An Internship at the Cleveland Museum of Natural History Wildlife Center	Wildlife Nature Preserve	Cleveland Museum of Natural History
I: Setting the Stage: Internship in Playwriting: ("Kindling," "Pennsylvanian Spring," "The Gulf," and "Murder in Mind")	Internship	Dobama Theater & Night Kitchen

Songbirds: A Background Study for an Upcoming CMNH Wildlife Refuge Project	Wildlife Nature Preserve	Cleveland Museum of Natural History
The Effects of Solution Viscosity on Diffusion Rates, Studied by Voltammetry	Chemistry	Case Western Reserve University
I: An Internship in Cultural Anthropology Looking at the Impact of African Images on Western Perceptions Historically	Anthropology (Cultural)	Cleveland Museum of Natural History
I: Modern Needs in the International Business World: Functional Spanish Translation	Internship in Business and Spanish Translation	TruSeal Corporation
A Study of Patterns in the Occurrence of Math Anxiety in Students	Epidemiology (Psychology)	Cleveland State University
An Outcome Study: The Results of Total Hip Replacement and Total Knee Replacement- Practical Strategies that Allow Patients to Report their Function and Satisfaction	Epidemiology (Hip Replacement Success)	Cleveland Clinic
A Comparative Study of Kyphosis and Scoliosis using the Hamann Todd Collection: A Physical Anthropology Study	Anthropology (Physical)	Cleveland Museum of Natural History
Micromachined Nanomembranes for Artificial Pancreas and Kidney	BioMEMS Nanotechnology	Cleveland Clinic
A Theoretical Approach to the Optimal Length of a Musical Scale	Mathematics	Ohio State University Ross Math Program
Changes in River Ecosystem Caused by the Kent Dam	Environmental Studies	Cleveland State University
I: Modern Needs in the International Business World: Functional Spanish Translation	Internship in Business and Spanish Translation	TruSeal Corporation
Microbiology: A Study of Bacteria and Antibiotic Resistance	Microbiology	Cleveland Clinic
Nueroscience Research	Neuroscience Research	CASE School of Medicine
Facing History Internship	Diversity	Facing History and Ourselves

Neuroscience Research Related to Multiple Sclerosis	Neuroscience Research (MS)	Cleveland Clinic
Research in Non-Linear Optics and the Development of a Hologram	Physics (Optics)	Case Western Reserve University
Occurrence and Characteristics of Asthma in Children	Epidemiology/ Childhood Asthma	Cleveland Clinic
An Analysis of Competitive Swim Strokes & Their Relationship to Sports Injuries in Swimmers	Epidemiology/Sports Health & Rehab.	Cleveland Clinic
I: An Internship in Architecture	Architecture Internship	Osborn Architects
A Theoretical Astrophysical Study into Gravitational Lensing	Astrophysics	Case Western Reserve University
Clinical Study Regarding How and When Ultrasound Imaging Can Be Used During Cardiac Surgery	Cardiology Research	Cleveland Clinic
The Occurrence of Obesity in Children and Development of Intervention Techniques	Epidemiology	Case Western Reserve University
Mammary Gland Hyperplasia and Cancer Predisposition in Transgenic Mice	Pharmacology	CASE School of Medicine
Neuroscience Research	Neuroscience Research	CASE School of Medicine
I: A Shadowing Experience in Dentistry	Dentistry Internship	CASE School of Dentistry
Cardiology Research	Cardiology	Cleveland Clinic
An Analysis of Competitive Swim Strokes & Their Relationship to Sports Injuries in Swimmers	Epidemiology (Sports Injuries)	Cleveland Clinic
Adult Stem Cell Research	Stem Cells (Adults)	Cleveland Clinic
Pharmacology: Estrogen Receptor and Breast Cancer Research	Pharmacology	CASE School of Medicine

I: The Apollo Moon Landings: The Development and Production of a Planetarium Show at the CMNH Shafran Planetarium	Internship in Production	Cleveland Museum of Natural History
Patterns and Predictions in Chronic Pain Management	Epidemiology	Cleveland Clinic
Macular Degeneration Research	Genetics (Eye Disease)	Cleveland Clinic
Heart Disease: Focus on Atrial Fibrillation	Cardiology Research	Cleveland Clinic
The Study of Patterns in Parasitic Disease Lymphatic Filariasis in Third World Countries	Epidemiology	CASE School of Medicine
The Archaeology of Ohio	Archaeology	Cleveland Museum of Natural History
Background Study in Pediatric Oncology	Pediatric Oncology	Cleveland Clinic
Independent Project in Philanthropy and Community Service Related to the Treatment of Breast Cancer	Service Learning	Hathaway Brown School
Oncology Research Related to Breast Cancer	Oncology/ Pharmacology	CASE School of Medicine
Research Related to Microsurgery Techniques for Hand Reattachment	Microsurgery	Cleveland Clinic
Biomedical Engineering: The Study of Nanotechnology in the Diagnoses and Treatment of Coronary Disease	Biomedical Engineering	Cleveland Clinic
A Background Study in Neurological Research	Adult Brain Stem Cells	Hathaway Brown School
A Study on the Treatment of Burns at MetroHealth Medical Center Burn Unit	Medicine	MetroHealth Medical Center
Neurosurgical Methods for Pain Management using Genetically Altered Viruses	Neuroscience Research	Cleveland Clinic

Oncology Research: The Search for a Cure for Lung Cancer	Oncology	Cleveland Clinic
A Study in Hearing Loss	Hearing Loss Research	Cleveland Clinic
Pharmacology Research Related to the Eradication of Disease Such as Cystic Fibrosis	Pharmacology	CASE School of Medicine
Microelectrochemical Sensor to Detect Abnormal Levels in the Blood as an Indicator of Oncoming Heart Attack/Stroke	Chemical Engineering	Case Western Reserve University
I: Shadowing Experience in a Television Studio	Media Internship	/
Apoptosis Research	Cellular and Genetic Research	Cleveland Clinic
I: Internship in City Planning	Internship in City Planning	/
Patterns of Occurrence in Autistic Children	Epidemiology	Cleveland Clinic
Adult Stem Cell Research	Adult Stem Cell Research	Cleveland Clinic