1. Record Nr. UNINA9910817087103321 Autore Pollen Daniel A Titolo Hannah's heirs: the quest for the genetic origins of Alzheimer's disease // Daniel A. Pollen Pubbl/distr/stampa New York, : Oxford University Press, c1996 **ISBN** 1-280-45284-6 0-19-802326-X 9786610452842 1-4237-4127-7 1-60256-133-8 Edizione [Expanded ed.] Descrizione fisica 1 online resource (xiii, 310 p.): ill Disciplina 616.8/31042 Soggetti Alzheimer's disease - Genetic aspects Alzheimer's disease Alzheimer's disease - Pathogenesis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references (p. 287-302) and index. Nota di contenuto Intro -- Contents -- Prologue -- PART I: FOUNDERS -- The Life and Death of Hannah -- Gregor Mendel -- Alois Alzheimer -- PART II: INTO THE WILDERNESS -- The Descendants of Hannah and Shlomo --Mendel's Heirs -- Alzheimer's Disease at Midcentury -- Enter Genetics -- New Seeds Are Sown -- No Longer Alone -- Twin Pillars of Hope --A Transmissible Virus? -- Base Camp, Circa 1980 -- PART III: THE ASCENT -- The New Basis for Linkage Maps of the Human Genome --The Quest for the Huntington's Disease Gene -- Charles -- Peter St.

THE WILDERNESS -- The Descendants of Hannah and Shlomo -- Mendel's Heirs -- Alzheimer's Disease at Midcentury -- Enter Genetics -- New Seeds Are Sown -- No Longer Alone -- Twin Pillars of Hope -- A Transmissible Virus? -- Base Camp, Circa 1980 -- PART III: THE ASCENT -- The New Basis for Linkage Maps of the Human Genome -- The Quest for the Huntington's Disease Gene -- Charles -- Peter St. George-Hyslop and the Link to Chromosome 21 -- A Gene for Amyloid -- A Siege of the Soul -- Elizabeth W. and the Second Family from Bobruisk -- A Unity of Heart and Mind -- Russia Once Again -- The Twenty-one Pedigrees of Nina Ivanovna Voskresenskaya -- How Many Genes? -- The Third Dove Goes Forth -- PART IV: THE PATH AHEAD -- Lost Tribes -- The First Abnormal Gene Is Found -- New Sightings -- Mutual Aid as a Factor in Evolution and in Genetic Research -- Hannah's Heirs -- EPILOGUE -- Landfall -- Hannah's Gene -- Notes -- References -- Index -- A -- B -- C -- D -- E -- F -- G -- H -- I -- J --

Sommario/riassunto

The internationally acclaimed story of Hannah's Heirs now resumes in this updated paperback edition with the discovery in June, 1995 of Hannah's gene--now known to account for the majority of mutations causing early onset familial Alzheimer's disease--and the equally important identification of the major genetic risk factor rendering increased susceptibility to the more frequently occurring late-onset Alzheimer's. With these recent discoveries, medical science is now poised to reach for an understanding of the causes of the various forms of Alzheimer's disease which, in turn, will inevitably lead to rational attempts to treat and prevent Alzheimer's. This fascinating medical detective story of modern science's promising assault on "the disease of the century" continues to unfold with suspense and to inform and inspire through the final word. In Hannah's Heirs, neurologist Dr. Dan Pollen himself tells the compelling story of Hannah's family and their monumental contributions to the fight against Alzheimer's. We are there in 1985 when Charles presents Pollen with three decades' worth of family medical records as well as data from studies that even Pollen and his associates did not then know existed. We see the selfless acts of Hannah's descendants in their struggle against Alzheimer's: greatgrandson Jeff's conviction that after his death his brain be used for all possible research; great-granddaughter Lucy's decision to overcome her dread of flying in order to reach the research center for testing; and Charles's continued research in the face of a disease that might strike him at any moment. Pollen sets this gripping story within the larger context of the efforts to solve the mysteries of Alzheimer's. He presents the foundations of modern genetic research, from Gregor Mendel's classic discovery of genes, to Alois Alzheimer's work on the brains of presenile dementia victims, to Watson and Crick's double helix model for the structure of DNA. He narrates the latter-twentieth-century efforts of scientists to systematically narrow down the causes of Alzheimer's: Carlton Gaidusek's research excluding slow viruses as a cause of Alzheimer's; and the stunning discovery of Peter St. George-Hyslop's group in Toronto in June, 1995 identifying Hannah's gene and thereby opening a new era in understanding the origins of Alzheimer's disease. At the same time, Pollen offers a penetrating look at the ongoing conflicts involved in scientific research, revealing how intense competition for prestige and funding has driven some scientists to hoard precious cell lines. These practices have impeded efforts to discover both the causes and the treatment of Alzheimer's in the shortest possible time. As Hannah's great-grandson Ben has written, "This is a story that had to be told. Aspirations were transcendent, but because it involved people it could not be told without tears." Written by a physician-scientist who has been a central figure in the study of familial Alzheimer's, Hannah's Heirs is an inspiring portrait of the efforts of a courageous family to confront and overcome a "personal" biological Holocaust," and an encouraging look at the advances in science that have created the basis for the eventual understanding and treatment of Alzheimer's disease. And for those who have seen the horrors of Alzheimer's, for all who fear the aging process that will take its toll on everyone, here is an inside look at one of the great medical detective stories of our time.