

Author Index to Volume 232

April-June 1986

A

- Aaronson, Stuart A. *See Rhim, Johng S.*
Abel, Patricia Powell; Nelson, Richard S.; De Barun; Hoffmann, Nancy; Rogers, Stephen G.; Fraley, Robert T.; Beachy, Roger N.: Delay of disease development in transgenic plants that express the tobacco mosaic virus coat protein gene. p738 9 May 1986.
Abelson, Philip H. (editors): Global manufacturing competition. p1181 6 June 1986. Materials science and engineering. p1485 20 June 1986. Physics through the 1990's. p693 9 May 1986. Trends in the use of oil. p141 11 Apr 1986.
Abraham, George N. *See Fay, Philip J.*
Abrams, John S. *See Zurawski, Gerard.*
Agranoff, B. W. *See Frey, K. A.*
Aguilar, Enrique: Biotechnology center (letter). p1080 30 May 1986.
Aharonov, Amnon: review of *On Growth and Form*, edited by H. Eugene Stanley and Nicole Ostrowsky. p891 16 May 1986.
Ainley, D. G.; Fraser, W. R.; Sullivan, C. W.; Torres, J. J.; Hopkins, T. L.; Smith, W. O.: Antarctic mesopelagic micronekton: evidence from seabirds that pack ice affects community structure. p847 16 May 1986.
Akiyama, Tetsu; Sudo, Chie; Ogawara, Hiroshi; Toyoshima, Kumao; Yamamoto, Tadashi: The product of the human c-erbB-2 gene: a 185-kilodalton glycoprotein with tyrosine kinase activity. p1644 27 June 1986.
Alexander, Elaine L. *See Harley, John B.*
Alexander, R. Wayne. *See Berk, Bradford C.*
Allan, Jonathan S. *See Kanki, Phyllis J.*
Alpert, S. B. *See Spencer, D. F.*
Alpher, Victor S.: Psychosexual development (letter). p307 18 Apr 1986.
Althuis, Thomas H.: Animal models in research (letter). p1079 30 May 1986.
Ananthan, Jayakumar; Goldberg, Alfred L.; Voellmy, Richard: Abnormal proteins serve as eukaryotic stress signals and trigger the activation of heat shock genes. p522 25 Apr 1986.
Anderson, J. E. *See Durbin, R. M.*
Anderson, R. C. *See Bame, S. J.*
Andreae, Meinrat O.; Charlson, Robert J.; Bruynseels, Frank; Storms, Hedwig; Van Grieken, Rene; Maenhaut, Willy: Internal mixture of sea salt, silicates, and excess sulfate in marine aerosols. p1620 27 June 1986.
Apel, J. R. *See Gasparovic, R. F.*
Applebury, M. L. *See Martin, R. L.*
Arathoon, W. R. and Birch, J. R.: Large-scale cell culture in biotechnology. p1390 13 June 1986.
Arbeille, Brigitte. *See Kanki, Phyllis J.*
Arditti, Joseph: Overhead costs on research grants (letter). p439 25 Apr 1986.
Armstrong, Daniel W.; Ward, Timothy J.; Armstrong, R. Douglas; Beesley, Thomas E.: Separation of drug stereoisomers by the formation of β -cyclodextrin inclusion complexes. p1132 30 May 1986.
Armstrong, R. Douglas. *See Armstrong, Daniel W.*
Arnett, Frank C. *See Harley, John B.*
Arnold, Arthur P. *See Kurz, Elizabeth M.*
Arnold, John M. and Carlson, Bruce A.: Living *Nautilus* embryos: preliminary observations. p73 4 Apr 1986.

- Arnold, Stevan J.: review of *The Statistics of Natural Selection on Animal Populations*, by Bryan F. J. Manly. p271 11 Apr 1986.
Arnstein, Paul. *See Rhim, Johng S.*
ar-Rushdi, Abbas. *See Erikson, Jan.*
Asbridge, J. R. *See Bame, S. J.*
Auyeung, A. *See Sastry, B. R.*
Ayres, William S.: review of *Prehistory of the Indo-Malaysian Archipelago*, by Peter Bellwood. p1280 6 June 1986.

B

- Baatz, Simon: review of *Magnificent Voyagers*, edited by Herman J. Viola and Carolyn Margolis. p1020 23 May 1986.
Babco, Eleanor L. *See Vetter, Betty M.*
Bach, Jean-François. *See Chatenoud, Lucienne.*
Bacon, Charles W. *See Lyons, Philip C.*
Baehr, W. *See Martin, R. L.*
Baker, Alison: Issue numbers and librarianship (letter). p919 23 May 1986.
Baker, D. N. *See Bame, S. J.*
Balaban, R. S.; Kantor, H. L.; Katz, L. A.; Briggs, R. W.: Relation between work and phosphate metabolite in the in vivo paced mammalian heart. p1121 30 May 1986.
Ball, James W. *See Nordstrom, Darrell Kirk.*
Bally, John: Interstellar molecular clouds. p185 11 Apr 1986.
Bame, S. J.; Anderson, R. C.; Asbridge, J. R.; Baker, D. N.; Feldman, W. C.; Fuselier, S. A.; Gosling, J. T.; McComas, D. J.; Thomsen, M. F.; Young, D. T.; Zwickl, R. D.: Comet Giacobini-Zinner: plasma description. p356 18 Apr 1986.
Barbosa, Pedro. *See Raupp, Michael J.*
Barendt, Jean. *See Souza, Lawrence M.*
Barile, Giuseppe. *See Faggioni, Alberto.*
Barin, Francis. *See Kanki, Phyllis J.*
Barker, Jeffery L. *See Majewska, Maria Dorota.*
Barnes, Deborah M. (news): AIDS-related brain damage unexplained. p1091 30 May 1986.
Benefits of animals in research described in new publication. p310 18 Apr 1986. Bird chimeras may be models for certain neurological diseases. p930 23 May 1986. Brain function decline in children with AIDS. p1196 6 June 1986. Grim projections for AIDS epidemic. p1589 27 June 1986. Nervous and immune system disorders linked in a variety of diseases. p160 11 Apr 1986. Steroids may influence changes in mood. p1344 13 June 1986. Tight money squeezes out animal models. p309 18 Apr 1986.
Baron, Jonathan: review of *Mathematical Problem Solving*, by Alan H. Schoenfeld. p1038 23 May 1986.
Barrett, Spencer C. H.: review of *Genetic Differentiation and Dispersal in Plants*, edited by P. Jacquard, G. Heim, and J. Antonovics. p1279 6 June 1986.
Baudrihaye, Marc. *See Geenen, Vincent.*
Bax, Ad and Lerner, Laura: Two-dimensional nuclear magnetic resonance spectroscopy. p960 23 May 1986.
Beachy, Roger N. *See Abel, Patricia Powell.*
Beal, R. C.; Monaldo, F. M.; Tilley, D. G.; Irvine, D. E.; Walsh, E. J.; Jackson, F. C.; Hancock, D. W., III; Hines, D. E.; Swift, R. N.; Gonzalez, F. I.; Lyzenga, D. R.; Zam-

bresky, L. F.: A comparison of SIR-B directional ocean wave spectra with aircraft scanning radar spectra. p1531 20 June 1986.

Beamer, Wesley G. *See Jansson, John-Olov.*

Beesley, Thomas E. *See Armstrong, Daniel W.*

Bell, P. M. *See Xu, J. A.*

Bendtzen, Klaus; Mandrup-Poulsen, Thomas; Nerup, Jørn; Nielsen, Jens H.; Dinarello, Charles A.; Svenson, Morten: Cytotoxicity of human π interleukin-1 for pancreatic islets of Langerhans. p1545 20 June 1986.

Benedik, Michael. *See Zurawski, Gerard.*

Bennett, J. A.: review of *Measuring the Universe*, by Albert Van Helden. p1153 30 May 1986.

Berg, Jeremy M.: Potential metal-binding domains in nucleic acid binding proteins. p485 25 Apr 1986.

Berk, Bradford C.; Alexander, R. Wayne; Brock, Tommy A.; Gimbrone, Michael A., Jr.; Webb, R. Clinton: Vasoconstriction: a new activity for platelet-derived growth factor. p87 4 Apr 1986.

Beutler, Bruce; Krochin, Nadia; Milsark, Ian W.; Luedke, Christina; Cerami, Anthony: Control of cachectin (tumor necrosis factor) synthesis: mechanisms of endotoxin resistance. p977 23 May 1986.

Bias, Wilma B. *See Harley, John B.*

Biedler, June L. *See Scotto, Kathleen W.*

Bielby, William T.: review of *Households, Employment, and Gender*, by Paula England and George Farkas. p1021 23 May 1986.

Birch, J. R. *See Arathoon, W. R.*

Birgeneau, Robert J. and Horn, Paul M.: Two-dimensional rare gas solids. p329 18 Apr 1986.

Birkes, David: Sly statistics (letter). p698 9 May 1986.

Bishop, Paul E.; Premakumar, R.; Dean, Dennis R.; Jacobson, Marty R.; Chisnell, John R.; Rizzo, Thomas M.; Kopczynski, Jennifer: Nitrogen fixation by *Azotobacter vinelandii* strains having deletions in structural genes for nitrogenase. p92 4 Apr 1986.

Bishop, Richard W. *See Yamamoto, Tokuo.*

Bitar, K. N.; Bradford, P.; Putney, J. W., Jr.; Makhoul, G. M.: Cytosolic calcium during contraction of isolated mammalian gastric muscle cells. p1143 30 May 1986.

Blackwell, Meredith; Bridges, J. Robert; Moser, John C.; Perry, Thelma J.: Hyperphoretic dispersal of a *Pixidiophora* anamorph. p993 23 May 1986.

Bleackley, R. Chris. *See Lobe, Corrinne G.*

Bloch, Erich: Basic research and economic health: the coming challenge. p595 2 May 1986.

Blum, M. *See Durbin, R. M.*

Blumenthal, David; Gluck, Michael; Louis, Karen Seashore; Stoto, Michael A.; Wise, David: University-industry research relationships in biotechnology: implications for the university. p1361 13 June 1986.

Blundell, T. L. *See Wood, S. P.*

Bochsler, P. *See Ogilvie, Keith W.*

Bolton, George W.; Nester, Eugene W.; Gordon, Milton P.: Plant phenolic compounds induce expression of the *Agrobacterium tumefaciens* loci needed for virulence. p983 23 May 1986.

Boniver, Jacques. *See Geenen, Vincent.*

Bonnet, R. M.: European space telescope (letter). p1486 20 June 1986.

Bonthonron, David. *See* Fay, Philip J.
Boone, Thomas C. *See* Slamon, Dennis J. *See also* Souza, Lawrence M.
Bothwell, Mark A. *See* Chao, Moses V.
Botstein, David: The molecular biology of color vision. p142 11 Apr 1986.
Bourgeois, Jean-Pierre. *See* Rakic, Pasko.
Bowers, William S.; Hoch, Harvey C.; Evans, Philip H.; Katayama, Masato: Thallophytic allelopathy: isolation and identification of laetic acid. p105 4 Apr 1986.
Boyd, F. R. and Gurney, John J.: Diamonds and the African lithosphere. p472 25 Apr 1986.
Boyer, Paul D.: The case for a return to fixed indirect costs. p1508 20 June 1986.
Bradford, P. *See* Bitar, K. N.
Brady, John N. *See* Ishii, Shunsuke.
Braxford, Mark R., Jr.: *De Gustibus Non Est Disputandum*: a spiral center for taste in the brain of the teleost fish, *Hesterotis niloticus*. p489 25 Apr 1986.
Brandt, John C. *See* von Rosenvinge, Tycho T.
Brasch, Klaus R. *See* McDermid, Heather E.
Brayer, Gary. *See* McPherson, Alexander.
Bridges, J. Robert. *See* Blackwell, Meredith.
Briggs, R. W. *See* Balaban, R. S.
Brittain, James E.: review of *Willis R. Whitney, General Electric, and the Origins of U.S. Industrial Research*, by George Wise, and *The Making of American Industrial Research*, by Leonard S. Reich. p165 27 June 1986.
Brock, Tommy A. *See* Berk, Bradford C.
Brooke, Gerald. *See* DiMarchi, Richard.
Brown, F.: Human immunodeficiency virus (letter). p1486 20 June 1986.
Brown, Michael S. *See* Yamamoto, Tokuo.
— and Goldstein, Joseph L.: A receptor-mediated pathway for cholesterol homeostasis. p34 4 Apr 1986.
Brown, Thomas H. *See* Kelso, Stephen R.
Brownlee, M.; Vlassara, H.; Koone, A.; Ulrich, P.; Cerami, A.: Aminoguanidine prevents diabetes-induced arterial wall protein cross-linking. p1629 27 June 1986.
Brugnara, Carlo; Bunn, H. Franklin; Tosteson, Daniel C.: Regulation of erythrocyte cation and water content in sickle cell anemia. p388 18 Apr 1986.
Bruszewski, Joan. *See* Souza, Lawrence M.
Bruynseels, Frank. *See* Andreae, Meinrat O.
Buck, C. Randall. *See* Chao, Moses V.
Buku, A. *See* Wood, S. P.
Bunick, Gerard J. *See* Überbacher, Edward C.
Bunn, H. Franklin. *See* Brugnara, Carlo.
Buonagurio, Deborah A.; Nakada, Susumu; Parvin, Jeffrey D.; Krystal, Mark; Palese, Peter; Fitch, Walter M.: Evolution of human influenza A viruses over 50 years: rapid, uniform rate of change in NS gene. p980 23 May 1986.
Burger, Richard L.: review of *Andean Ecology and Civilization*, edited by Shozo Masuda, Izumi Shimada, and Craig Morris. p110 4 Apr 1986.
Burgess-Cassler, Anthony. *See* Hinrichsen, Robert D.
Burn, John. *See* McDermid, Heather E.
Burnett, Roger M. *See* Roberts, Michael M.
Burns, R. *See* Durbin, R. M.
Buzas, Martin A. and Culver, Stephen J.: Geographic origin of benthic foraminiferal species. p775 9 May 1986.

C

Caine, Nelson. *See* Gleason, Kevin J.
Cantor, Charles R. *See* Giannini, Suzanne Holmes.
Cantrell, Michael A. *See* Grabstein, Kenneth H.
Carazo, José María. *See* Jiménez, Javier.

Carey, William D.: How in the world are we? (editorial). p1073 30 May 1986.
— and Ratchford, J. Thomas: Survival politics: science and the budget dilemma (editorial). p305 18 Apr 1986.
Carle, Georges F.; Frank, Mark; Olson, Maynard V.: Electrophoretic separations of large DNA molecules by periodic inversion of the electric field. p65 4 Apr 1986.
Carlson, Bruce A. *See* Arnold, John M.
Carlson, Elof Axel: review of *In the Name of Eugenics*, by Daniel J. Kevles. p531 25 Apr 1986.
Carlson, W. Bernard: review of *Edison's Electric Light*, by Robert Friedel and Paul Israel. p1018 23 May 1986.
Carney, Thom. *See* Shadlen, Michael.
Carpenter, John F. *See* Hand, Steven C.
Carrascosa, José L. *See* Jiménez, Javier.
Cascio, Duilio. *See* McPherson, Alexander.
Cates, M. E. *See* Witten, T. A.
Cerami, A. *See* Brownlee, M.
Cerami, Anthony. *See* Beutler, Bruce.
Chanan, Gary: review of *The Crab Nebula and Related Supernova Remnants*, edited by Minas C. Kafatos and Richard B. C. Henry. p778 9 May 1986.
Chao, Moses V.; Bothwell, Mark A.; Ross, Alonzo H.; Koprowski, Hilary; Lanahan, Anthony A.; Buck, C. Randall; Sehgal, Amita: Gene transfer and molecular cloning of the human NGF receptor. p518 25 Apr 1986.
Charig, Alan J.; Greenaway, Frank; Milner, Angela C.; Walker, Cyril A.; Whybrow, Peter J.: *Archaeopteryx* is not a forgery. p622 2 May 1986.
Charlson, Robert J. *See* Andreae, Meinrat O.
Chatenoud, Lucienne; Jonker, Margreet; Villemain, Françoise; Goldstein, Gideon; Bach, Jean-François: The human immune response to the OKT3 monoclonal antibody is oligoclonal. p1406 13 June 1986.
Chavin, Stephen I. *See* Fay, Philip J.
Chazin, Vicki R. *See* Slamon, Dennis J. *See also* Souza, Lawrence M.
Chen, Kenneth K. *See* Souza, Lawrence M.
Cheng-Mayer, Cecilia. *See* Levy, Jay A.
Chin, J. E. *See* Shen, D.-w.
Chisnell, John R. *See* Bishop, Paul E.
Chua, Nam-Hai. *See* Fluhr, Robert.
Church, Thomas M. *See* Luther, George W., III.
Cimino, JoBea. *See* Elachi, Charles.
Coffin, John; Haase, Ashley; Levy, Jay A.; Montagnier, Luc; Oroszlan, Steven; Teich, Natalie; Temin, Howard; Toyoshima, Kumao; Varmus, Harold; Vogt, Peter; Weiss, Robin: Human immunodeficiency viruses (letter). p697 9 May 1986.
Cohan, Christopher S. and Kater, Stanley B.: Suppression of neurite elongation and growth cone motility by electrical activity. p1638 27 June 1986.
Colacino, James M. *See* Kraus, David W.
Colley, S. *See* Wilson, T. R. S.
Collins, William E. *See* Ferreira, Arturo.
Colten, Harvey R. *See* Perlmutter, David H.
Conlon, Paul J. *See* Grabstein, Kenneth H.
Conover, R. J.; Herman, A. W.; Prinsenberg, S. J.; Harris, L. R.: Distribution of and feeding by the copepod *Pseudocalanus* under fast ice during the Arctic spring. p1245 6 June 1986.
Cook, Donald L. *See* VanDevender, J. Pace.
Cooper, S. *See* Wood, S. P.
Coplan, M. A. *See* Ogilvie, Keith W.
Coroniti, Ferdinand V. *See* Scarf, Frederick L.
Cosman, Monique. *See* Luther, George W., III.
Couturier, P. *See* Meyer-Vernet, N.
Cowley, S. W. H. *See* Hynds, R. J.
Cox, C. Christine. *See* Smith, Charles D.
Cozzarelli, Nicholas R. *See* Wasserman, Steven A.
Cracknell, Victor. *See* DiMarchi, Richard.
Crane, Peter R.; Friis, Else Marie; Pedersen, Kaj Raunsgaard: Lower Cretaceous angiosperm flowers: fossil evidence on early radiation of dicotyledons. p852 16 May 1986.
Crawford, M. L. J. *See* Harwerth, Ronald S.
Crawford, Mark (news): Budget bills boost R&D spending. p921 23 May 1986. Budget squeeze may stall start-up of new colliders. p316 18 Apr 1986. Congress urged to change patterns of research support. p571 2 May 1986. DOE fusion program. p1486 20 June 1986. GAO hits accounting on DOE accelerators. p1190 6 June 1986. Insurance drought fosters self-help plan for biotechnology firms. p154 11 Apr 1986. Johnston drops opposition to CEBAF. p707 9 May 1986. Larger public sector role sought on biotech. p15 4 Apr 1986. Laser fusion program burdened by overclassification. p446 25 Apr 1986. Senate tax bill draws few protests from research community. p929 23 May 1986. Sensitive nuclear technology escapes detailed export review. p1087 30 May 1986. Soviets buy robots. p1332 13 June 1986. Soviet-U.S. fusion pact divides Administration. p925 23 May 1986. Uncertainty clouds R&D budget. p146 11 Apr 1986.
Croce, Carlo M. *See* Erikson, Jan.
Culkin, F. *See* Wilson, T. R. S.
Culliton, Barbara J. (news): David Packard tackles OMB on indirect costs. p315 18 Apr 1986. NIH starts new grants program. p566 2 May 1986. Pressure to cut the deficit creates uncertainty for biomedical research. p564 2 May 1986. University presidents predict harm from uncoordinated deficit reduction policies. . . . p704 9 May 1986.
Culver, Stephen J. *See* Buzas, Martin A.

D and E

Dannals, Robert F. *See* Wong, Dean F.
Dansgaard, W. *See* Mayewski, P. A.
Darius, Harald; Lefer, David J.; Smith, J. Bryan; Lefer, Allan M.: Role of platelet-activating factor-acether in mediating guinea pig anaphylaxis. p58 4 Apr 1986.
DasSarma, Shiladitya; Tischer, Edmund; Goodman, Howard M.: Plant glutamine synthetase complements a *glnA* mutation in *Escherichia coli*. p1242 6 June 1986.
Dave, Jitendra R. *See* Eskay, Robert.
David, Edward E., Jr.: An industry picture of U.S. science policy. p968 23 May 1986.
Davidson, C. I. *See* Mayewski, P. A.
Davies, John M. *See* Ducklow, Hugh W.
Davies, Kelvin J. A.: High school scientists (letter). p145 11 Apr 1986.
Davies, Kenneth: review of *The Propagation of Radio Waves*, by K. G. Budden. p1448 13 June 1986.
Davies, Peter. *See* Wolozin, Benjamin L.
Davis, D. Scott. *See* Mumma, Michael J.
Davis, Richard S.: review of *The Upper Paleolithic of the Central Russian Plain*, by Olga Soffer. p1024 23 May 1986.
Davis, Ronald B.: Diatoms and acid rain (letter). p697 9 May 1986.
De, Barun. *See* Abel, Patricia Powell.
Dean, Dennis R. *See* Bishop, Paul E.
Defresne, Marie-Paule. *See* Geenen, Vincent.
Deisz, R. A. *See* Misgeld, U.
Delzer, Gary A. *See* Kolts, John H.
Denis, Francois. *See* Kanki, Phyllis J.
Denniston, K. J.; Hoyer, B. H.; Smedile, A.;

- Wells, F. V.; Nelson, J.; Gerin, J. L.: Cloned fragment of the hepatitis delta virus RNA genome: sequence and diagnostic application. p873 16 May 1986.
- Dervan, Peter B.: Design of sequence-specific DNA-binding molecules. p464 25 Apr 1986.
- Deryck, Rik. *See* Schreiber, Alain B.
- Deuel, Ruthmary K.: Measurement of brain deoxyglucose metabolism by NMR. p777 9 May 1986.
- de Vries, Jan E. *See* Spits, Hergen.
- de Zeeuw, Tim: review of *Gravitational Physics of Stellar and Galactic Systems*, by William C. Saslaw. p778 9 May 1986.
- Dibner, Mark D.: Biotechnology in Europe. p1367 13 June 1986.
- Dickson, David (news): Approval seen for new U.S. chemical weapons. p567 2 May 1986.
- Ariane failure hits Europe's space efforts. p1340 13 June 1986.
- British telescope dogged by British weather. p19 4 Apr 1986.
- Cancer deaths probed at Pasteur Institute. p1597 27 June 1986.
- Europe plans its own mini space station. p816 16 May 1986.
- European commission proposes shift in joint research. p447 25 Apr 1986.
- Europeans wary of U.S. offer on military R&D. p314 18 Apr 1986.
- France cuts research to fund new jobs. p707 9 May 1986.
- Gene-splicing debate heats up in Germany. p13 4 Apr 1986.
- Microgravity seeks lift-off. p817 16 May 1986.
- New French government scraps research ministry. p19 4 Apr 1986.
- Researchers found reluctant to test theories. p1333 13 June 1986.
- Dickson, Dennis W. *See* Wolozin, Benjamin L.
- Dickson, Robert B.; McManaway, Mary E.; Lippman, Marc E.: Estrogen-induced factors of breast cancer cells partially replace estrogen to promote tumor growth. p1540 20 June 1986.
- Dilts, Judith A. and Quackenbush, Robert L.: A mutation in the R body-coding sequence destroys expression of the killer trait in *P. tetraurelia*. p641 2 May 1986.
- DiMarchi, Richard; Brooke, Gerald; Gale, Charles; Cracknell, Victor; Doel, Timothy; Mowat, Noel: Protection of cattle against foot-and-mouth disease by a synthetic peptide. p639 2 May 1986.
- Dina, Dino. *See* Levy, Jay A.
- Dinarello, Charles A. *See* Bendtzen, Klaus. *See also* Perlmutter, David H.
- Dodd, H. U. *See* Misgeld, U.
- Doel, Timothy. *See* DiMarchi, Richard.
- Downs, Thomas R. *See* Jansson, John-Olov.
- Drachman, Daniel B. *See* McIntosh, Kevin R.
- Dreesman, Gordon R. *See* Kennedy, Ronald C.
- Drell, Sidney D.: "Disloyalty" and DOD funding (letter). p1183 6 June 1986.
- Ducklow, Hugh W.; Purdie, Duncan A.; Williams, Peter J. LeB.; Davies, John M.: Bacterioplankton: a sink for carbon in a coastal marine plankton community. p865 16 May 1986.
- Dudek, Pamela. *See* Wagner, John A.
- Duncan, Alessandra, M. V. *See* McDermid, Heather E.
- Duncan, Gary C. *See* Harwerth, Ronald S.
- Durbin, R. M.; Burns, R.; Moulai, J.; Metcalf, P.; Freymann, D.; Blum, M.; Anderson, J. E.; Harrison, S. C.; Wiley, D. C.: Protein, DNA, and virus crystallography with a focused imaging proportional counter. p1127 30 May 1986.
- Dürselen, H. *See* Schober, R.
- Eardley, Douglas M.: review of *Relativistic Astrophysics*, by Marek Demiański. p778 9 May 1986.
- Eckenhoff, Maryellen F. *See* Rakic, Pasko.
- Eckhardt, Robert B.: Punctuated equilibrium: from the other side (letter). p920 23 May 1986.
- Eddy, Roger L. *See* Nathans, Jeremy (p203).
- Ehlers, Cindy L. *See* Wehrenberg, William B.
- Ehrenkaufer, R. L. E. *See* Frey, K. A.
- Eichberg, Jorg W. *See* Kennedy, Ronald C.
- Einzig, Stanley. *See* Hohmann, Elizabeth L.
- Elachi, Charles; Cimino, JoBea; Settle, M.: Overview of the Shuttle Imaging Radar-B preliminary scientific results. p1511 20 June 1986.
- Elberg, Sanford S.: review of *The State of Graduate Education*, edited by Bruce L. R. Smith. p1010 23 May 1986.
- Elde, Robert P. *See* Hohmann, Elizabeth L.
- Emanuel, Beverly S. *See* Erikson, Jan.
- Enea, Vincenzo. *See* Ferreira, Arturo.
- Engleman, Edgar G. *See* Lifson, Jeffrey D.
- Erikson, Jan; Finger, Lawrence; Sun, Lee; arr-Rushdi, Abbas; Nishikura, Kazuko; Minowada, Jun; Finan, Janet; Emanuel, Beverly S.; Nowell, Peter C.; Croce, Carlo M.: Dereulation of c-myc by translocation of the α -locus of the T-cell receptor in T-cell leukemias. p884 16 May 1986.
- Eskay, Robert; Zukowska-Grojec, Zofia; Haass, Markus; Dave, Jitendra R.; Zamir, Nadav: Circulating atrial natriuretic peptides in conscious rats: regulation of release by multiple factors. p636 2 May 1986.
- Essex, M. *See* Kanki, Phyllis J.
- Evans, Philip H. *See* Bowers, William S.
- F**
- Faggioni, Alberto; Zompetta, Claudia; Grimaldi, Settimio; Barile, Giuseppe; Frati, Luigi; Lazzini, Janis: Calcium modulation activates Epstein-Barr virus genome in latently infected cells. p1554 20 June 1986.
- Fainberg, J. *See* Meyer-Vernet, N.
- Farber, Henry S.: review of *The Future Impact of Automation on Workers*, by Wassily Leontief and Faye Duchin. p1022 23 May 1986.
- Farquhar, Robert W. *See* von Rosenvinge, Tycho T.
- Fay, Philip J.; Kawai, Yohko; Wagner, Denisa D.; Ginsburg, David; Bonthron, David; Ohlsson-Wilhelm, Betsy M.; Chavin, Stephen I.; Abraham, George N.; Handin, Robert I.; Orkin, Stuart H.; Montgomery, Robert R.; Marder, Victor J.: Propolyptide of von Willebrand factor circulates in blood and is identical to von Willebrand antigen II. p995 23 May 1986.
- Fein, Alan: Blockade of visual excitation and adaptation in *Limulus* photoreceptor by GDP- β -S. p1543 20 June 1986.
- Feldman, W. C. *See* Barne, S. J.
- Fell, H. Perry; Smith, R. Graham; Tucker, Philip W.: Molecular analysis of the t(2;14) translocation of childhood chronic lymphocytic leukemia. p491 25 Apr 1986.
- Ferreira, Arturo; Schofield, Louis; Enea, Vincenzo; Schellekens, Huub; van der Meide, Peter; Collins, William E.; Nussenweig, Ruth S.; Nussenweig, Victor: Inhibition of development of exoerythrocytic forms of malaria parasites by γ -interferon. p881 16 May 1986.
- Fields, Bernard N. *See* Keroack, Mark.
- Finan, Janet. *See* Erikson, Jan.
- Finegold, Leonard X. and Tyagi, Som D.: Geometry problem (letter). p1588 27 June 1986.
- Finger, Lawrence. *See* Erikson, Jan.
- Finlay, B. Brett. *See* Lobe, Corrinne G.
- Fischman, A. J. *See* Wood, S. P.
- Fitch, Walter M. *See* Buonagurio, Deborah A.
- Fluhr, Robert; Kuhlemeier, Cris; Nagy, Ferenc; Chu, Nam-Hai: Organ-specific and light-induced expression of plant genes. p1106 30 May 1986.
- Fojo, A. *See* Shen, D.-w.
- Fralay, Robert T. *See* Abel, Patricia Powell.
- Franchimont, Paul. *See* Geenen, Vincent.
- Frank, Mark. *See* Carle, Georges F.
- Fraser, W. R. *See* Ainley, D. G.
- Frati, Luigi. *See* Faggioni, Alberto.
- Frey, K. A.; Agranoff, B. W.; Young, A. B.; Hichwa, R. D.; Ehrenkaufer, R. L. E.: Human brain receptor distribution (technical comment). p1269 6 June 1986.
- Freymann, D. *See* Durbin, R. M.
- Friedman, Gerald M.: The dilemma of the geoscientist (letter). p1587 27 June 1986.
- Friis, Else Marie. *See* Crane, Peter R.
- Frohman, Lawrence A. *See* Jansson, John-Olov.
- Fuchs, Victor R.: Sex differences in economic well-being. p459 25 Apr 1986.
- Fujita, Jun. *See* Rhim, Johng S.
- Furuno, Katsuhisa. *See* Onodera, Akifumi.
- Fuselier, S. A. *See* Barne, S. J.
- Fyfe, W. S.: review of *Geology and Radwaste*, by A. G. Milne. p1651 27 June 1986.
- G**
- Gabriel, Diane. *See* Sloan, Robert E.
- Gabilove, Janice. *See* Souza, Lawrence M.
- Gahl, William A. *See* Renlund, Martin.
- Galambos, Louis: review of *Historical Writing on America Science*, edited by Sally Gregory Kohlstedt and Margaret W. Rossiter. p406 18 Apr 1986.
- Gale, Charles. *See* DiMarchi, Richard.
- Gallo, Michael A. *See* Umbreit, Thomas H.
- Gallo, Robert C. *See* Gilden, Raymond V. *See also* Hahn, Beatrice H.
- Galvin, A. B. *See* Ipavich, F. M.
- Ganem, Don. *See* Seeger, Christoph.
- Gasparovic, R. F.; Apel, J. R.; Thompson, D. R.; Tochko, J. S.: A comparison of SIR-B synthetic aperture radar data with ocean internal wave measurements. p1529 20 June 1986.
- Gebhard, Roger L. *See* Hohmann, Elizabeth L.
- Geenen, Vincent; Legros, Jean-Jacques; Franchimont, Paul; Baudrihaye, Marc; Défresne, Marie-Paule; Boniver, Jacques: The neuroendocrine thymus: coexistence of oxytocin and neuropeptides in the human thymus. p508 25 Apr 1986.
- Geiss, J. *See* Ogilvie, Keith W.
- George, John H. *See* Gleason, Kevin J.
- Gerin, J. L. *See* Denniston, K. J.
- Gershenfeld, Howard K. and Weissman, Irving L.: Cloning of a cDNA for a T cell-specific serine protease from a cytotoxic T lymphocyte. p854 16 May 1986.
- Gershon, Elliot S.: Quality of intramural research (letter). p919 23 May 1986.
- Giannini, Suzanne Holmes; Schittini, Mario; Keithly, Jan S.; Warburton, Peter W.; Cantor, Charles R.; Van der Ploeg, Lex H. T.: Karyotype analysis of *Leshmania* species and its use in classification and clinical diagnosis. p762 9 May 1986.
- Gilbert, Susan H.: review of *Energetic Aspects of Muscle Contraction*, by Roger C. Woledge, Nancy A. Curtin, and Earl Homsher. p1028 23 May 1986.
- Gilden, Raymond V.; Gonda, Matthew A.; Sarnagdharan, M. G.; Popovic, Mikulas; Gallo, Robert C.: HTLV-III legend correction (letter). p307 18 Apr 1986.
- Gillis, Steven. *See* Grabstein, Kenneth H.
- Gilman, H. H. *See* Spencer, D. F.
- Gimbrone, Michael A., Jr. *See* Berk, Bradford C.
- Ginsberg, Annette S. *See* Hackett, Kevin J.

- Ginsburg, David. *See* Fay, Philip J.
- Gitschier, Jane; Wood, William I.; Shuman, Marc A.; Lawn, Richard M.: Identification of missense mutation in the factor VIII gene of a mild hemophiliac. p1415 13 June 1986.
- Gjedde, Albert. *See* Wong, Dean F.
- Glass, Alexander J.: DOE fusion program (letter). p1486 20 June 1986.
- Glason, Kevin J.; Krantz, William B.; Caine, Nelson; George, John H.; Gunn, Robert D.: Geometrical aspects of sorted patterned ground in recurrently frozen soil. p216 11 Apr 1986.
- Gloeckler, G. *See* Ipavich, F. M.
- Gluck, Michael. *See* Blumenthal, David.
- Goh, J. W. *See* Sastry, B. R.
- Goh, Wei Chun. *See* Greene, Warner C.
- Goldberg, Alfred L. *See* Ananthan, Jayakumar. *See also* Waxman, Lloyd.
- Goldberger, Gabriel. *See* Perlmutter, David H.
- Goldman-Rakic, Patricia S. *See* Rakic, Pasko.
- Goldstein, Allan L. *See* Sarin, Prem S.
- Goldstein, Gideon. *See* Chatenoud, Lucienne.
- Goldstein, Joseph L. *See* Brown, Michael S. *See also* Yamamoto, Tokuo.
- Golovchenko, J. A.: The tunneling microscope: a new look at the atomic world. p48 4 Apr 1986.
- Gonda, Matthew A. *See* Gilden, Raymond V.
- Gonzalez, F. I. *See* Beal, R. C.
- Goodman, Howard M. *See* DasSarma, Shiladitya.
- Gordon, Milton P. *See* Bolton, George W.
- Gosling, J. T. *See* Bame, S. J.
- Gottesman, M. M. *See* Shen, D.-w.
- Gould, James L.: The locale map of honey bees: do insects have cognitive maps? p861 16 May 1986.
- Gould, Stephen Jay: Punctuated equilibrium: empirical response (letter). p439 25 Apr 1986.
- Grabstein, Kenneth H.; Urdal, David L.; Turowski, Robert J.; Mochizuki, Diane Y.; Price, Virginia L.; Cantrell, Michael A.; Gillis, Steven; Conlon, Paul J.: Induction of macrophage tumocidal activity by granulocyte-macrophage colony-stimulating factor. p506 25 Apr 1986.
- Greenaway, Frank. *See* Charig, Alan J.
- Greene, Warner C.; Leonard, Warren J.; Wano, Yuji; Svetlik, Penny B.; Peffer, Nancy J.; Sodroski, Joseph G.; Rosen, Craig A.; Goh, Wei Chun; Haseltine, William A.: Trans-activator gene of HTLV-II induces IL-2 receptor and IL-2 cellular gene expression. p877 16 May 1986.
- Gregory, Joseph T.: review of *The National Museum of Natural History*, by Ellis L. Yochelson and edited by Mary Jarrett. p1030 23 May 1986.
- Grimaldi, Sertimio. *See* Faggioni, Alberto.
- Gross, Mart R.: review of *Behavioural Ecology*, edited by R. M. Sibly and R. H. Smith. p1446 13 June 1986.
- Gross, Paul R.: Administration of research (letter). p1078 30 May 1986.
- Grütter, Markus G. *See* Roberts, Michael M.
- Gunn, Robert D. *See* Gleason, Kevin J.
- Gurnett, Donald A. *See* Scarf, Frederick L.
- Gurney, John J. *See* Boyd, F. R.
- H**
- Haase, Ashley. *See* Coffin, John.
- Haass, Markus. *See* Eskay, Robert.
- Hackett, Kevin J.; Lynn, Dwight E.; Williamson, David L.; Ginsberg, Annette S.; Whitcomb, Robert F.: Cultivation of the *Drosophila* sex-ratio spiroplasma. p1253 6 June 1986.
- Hahn, Beatrice H.; Shaw, George M.; Taylor, Maria E.; Redfield, Robert R.; Markham, Phil D.; Saluhuddin, S. Z.; Wong-Staal, Flossie; Gallo, Robert C.; Parks, Elizabeth S.; Parks, Wade P.: Genetic variation in HTLV-III/LAV over time in patients with AIDS or at risk for AIDS. p1548 20 June 1986.
- Hall, Jeffrey C. *See* Kyriacou, C. P.
- Hancock, D. W., III. *See* Beal, R. C.
- Hand, Steven C. and Carpenter, John F.: pH-induced metabolic transitions in *Artemia* embryos mediated by a novel hysteretic trehalase. p1535 20 June 1986.
- Handel, Mark David: Of neologisms and oxymorons (letter). p810 16 May 1986.
- Handel, Steven H. *See* Stanton, Maureen L.
- Handin, Robert I. *See* Fay, Philip J.
- Hankins, Thomas L.: review of *Leviathan and the Air-Pump*, by Steven Shapin and Simon Schaffer. p1040 23 May 1986.
- Hansma, Paul K. *See* Sonnenfeld, Richard.
- Hardy, Richard R. *See* Sidman, Charles L.
- Harington, C. R. *See* Nelson, D. E.
- Harley, John B.; Reichlin, Morris; Arnett, Frank C.; Alexander, Elaine L.; Bias, Wilma B.; Provost, Thomas T.: Gene interaction at HLA-DQ enhances autoantibody production in primary Sjögren's syndrome. p1145 30 May 1986.
- Harp, Joel M. *See* Überbacher, Edward C.
- Harper, Alfred E.: Nutrition policy controversies (letter). p810 16 May 1986.
- Harris, L. R. *See* Conover, R. J.
- Harrison, Lionel G.: review of *Evolution as Entropy*, by Daniel R. Brooks and E. O. Wiley. p1027 23 May 1986.
- Harrison, Neil L. *See* Majewska, Maria Dorota.
- Harrison, S. C. *See* Durbin, R. M.
- Harwerth, Ronald S.; Smith, Earl L., III; Duncan, Gary C.; Crawford, M. L. J.; von Noorden, Gunter K.: Multiple sensitive periods in the development of the primate visual system. p235 11 Apr 1986.
- Haseltine, William A. *See* Greene, Warner C.
- Haslinger, Alois. *See* Scholer, Hans.
- Hayakawa, Kyoko. *See* Sidman, Charles L.
- Heguy, Adriana. *See* Scholer, Hans.
- Heiserman, Linda: review of *Animal Cell Biotechnology*, edited by R. F. Spier and J. B. Griffiths. p114 4 Apr 1986. review of *Bacteria in Their Natural Environments*, edited by Madlyn Fletcher and George D. Floodgate. p666 2 May 1986. review of *Fundamental Neuroanatomy*, by Walle J. H. Nauta and Michael Feirtag. p1653 27 June 1986. review of *Insect Locomotion*, edited by Michael Gewecke and Gernot Wendler. p666 2 May 1986. review of *Mathematical Physics*, by Robert Geroche. p1653 27 June 1986. review of *Meteorites*, by John T. Wasson. p113 4 Apr 1986. review of *Motivational Systems*, by Frederick Toates. p1653 27 June 1986. review of *Nucleic Acid Hybridisation*, edited by B. D. Hames and S. J. Higgins. p666 2 May 1986. review of *The Quaternary History of Ireland*, edited by Kevin J. Edwards and William P. Warren. p113 4 Apr 1986.
- Henley, J. M.; Lindstrom, J. M.; Oswald, R. E.: Acetylcholine receptor synthesis in retina and transport to optic tectum in goldfish. p1627 27 June 1986.
- Hennessey, Todd. *See* Hinrichsen, Robert D.
- Herbert, Edward. *See* Thomas, Gary.
- Herbert, Victor: Vegetables, fruits, and oncologist (letter). p11 4 Apr 1986.
- Herlyn, Dorothee; Ross, Alonzo H.; Koprowski, Hilary: Anti-idiotypic antibodies bear the internal image of a human tumor antigen. p100 4 Apr 1986.
- Herman, A. W. *See* Conover, R. J.
- Herschman, Arthur: We must keep meeting like this (AAAS). p258 11 Apr 1986.
- Herzenberg, Lee A. *See* Sidman, Charles L.
- Hesse, Elizabeth J. *See* Umbreit, Thomas H.
- Hessel, S. *See* Schober, R.
- Hichwa, R. D. *See* Frey, K. A.
- Hicks, Donald A.: "Disloyalty" and DOD funding (letter). p1183 6 June 1986.
- Hill, Curtis B. *See* Williams, Paul H.
- Hines, D. E. *See* Beal, R. C.
- Hinrichsen, Robert D.; Burgess-Cassler, Anthony; Soltvedt, Brook Chase; Hennessey, Todd; Kung, Ching: Restoration by calmodulin of a Ca^{2+} -dependent K^+ current missing in a mutant of *Paramecium*. p503 25 Apr 1986.
- Hoang, S. *See* Meyer-Vernet, N.
- Hoch, Harvey C. *See* Bowers, William S.
- Hoffmann, Nancy. *See* Abel, Patricia Powell.
- Hogikyan, Norman D. *See* Myerowitz, Rachel.
- Hogness, David S. *See* Nathans, Jeremy (pp193 and 203).
- Hohmann, Elizabeth L.; Elde, Robert P.; Ryaby, Joseph A.; Einzig, Stanley; Gebhard, Roger L.: Innervation of periosteum and bone by sympathetic vasoactive intestinal peptide-containing nerve fibers. p868 16 May 1986.
- Holden, Constance (news): Centers targeted by activists. p149 11 Apr 1986. Chilean, U.S. scientists given AAAS awards. p1597 27 June 1986. Congress approves Garrison compromise. p822 16 May 1986. Days may be numbered for polygraphs in the private sector. p705 9 May 1986. Giving mental illness its research due. p1084 30 May 1986. High court says no to Administration's Baby Doe rules. p1595 27 June 1986. Homelessness: experts differ on root causes. p569 2 May 1986. New annual report on global deterioration. p822 16 May 1986. A pivotal year for lab animal welfare. p147 11 Apr 1986. Rockefeller doubles Third World effort. p823 16 May 1986. Smithsonian photobiology lab to close. p447 25 Apr 1986. Yelena Bonner tells of medical abuse of her husband. p821 16 May 1986.
- Holden, Jeannette J. A. *See* McDermid, Heather E.
- Holloway, David: review of *Kapitza*, by F. B. Kedrov. p1559 20 June 1986.
- Holtgreve, Heidi. *See* Scholer, Hans.
- Honrath, R. E. *See* Mayewski, P. A.
- Hooks, Mary. *See* Taraschi, Theodore F.
- Hopkins, T. L. *See* Ainley, D. G.
- Horn, Paul M. *See* Birgeneau, Robert J.
- Horowitz, Irving Louis: Behavioral sciences: benign neglect? (letter). p1319 13 June 1986.
- Hovestadt, D. *See* Ipavich, F. M.
- Howard, Bruce. *See* Pozzatti, Rudy.
- Hoy, Ronald R.: review of *Model Neural Networks and Behavior*, edited by Allen I. Selverston. p272 11 Apr 1986. *See also* Yager, David D.
- Hoyer, B. H. *See* Denniston, K. J.
- Hozier, John C. *See* Sawyer, Jeffrey R.
- Hruby, Dennis E. *See* Thomas, Gary.
- Hruby, V. J. *See* Wood, S. P.
- Hughes, Robert E. *See* Langs, David A.
- Hunkins, Kenneth: review of *The Nordic Seas*, edited by Burton G. Hurdle. p1032 23 May 1986.
- Hunten, Donald M. *See* Sykes, Mark V.
- Husain, J. *See* Wood, S. P.
- Hydes, D. J. *See* Wilson, T. R. S.
- Hynds, R. J.; Cowley, S. W. H.; Sanderson, T. R.; Wenzel, K.-P. V.; Van Rooijen, J. J.: Observations of energetic ions from comet Giacobini-Zinner. p361 18 Apr 1986.
- I and J**
- Ianniello, Louis C.: Federal research funding: open competition (letter). p563 2 May 1986.

- Ichinose, Lester Y.: Animal models in research (letter). p1080 30 May 1986.
- Ip, Wing-Huen. *See* Scarf, Frederick L.
- Ipavich, F. M.; Galvin, A. B.; Gloeckler, G.; Hovestadt, D.; Klecker, B.; Scholer, M.: Comet Giacobini-Zinner: in situ observations of energetic heavy ions. p366 18 Apr 1986.
- Irvine, D. E. *See* Beal, R. C.
- Ishii, Shunsuke; Kadonaga, James T.; Tjian, Robert; Brady, John N.; Merlino, Glenn T.; Pastan, Ira: Binding of the Sp1 transcription factor by the human Harvey *ras1* proto-oncogene promoter. p1410 13 June 1986.
- Jackall, Robert: review of *Mechanics of the Middle Class*, by Robert Zussman. p1014 23 May 1986.
- Jackson, F. C. *See* Beal, R. C.
- Jacobson, Marty R. *See* Bishop, Paul E.
- Jansen, J. H. F.; Kuipers, A.; Troelstra, S. R.: A mid-Brunhes climatic event: long-term changes in global atmosphere and ocean circulation. p619 2 May 1986.
- Jansson, John-Olov; Downs, Thomas R.; Beamer, Wesley G.; Frohman, Lawrence A.: Receptor-associated resistance to growth hormone-releasing factor in dwarf "little" mice. p511 25 Apr 1986.
- Jemmerson, Ronald and Paterson, Yvonne: Mapping epitopes on a protein antigen by the proteolysis of antigen-antibody complexes. p1001 23 May 1986.
- Jiménez, Javier; Santisteban, Antonio; Carazo, José María; Carrascosa, José L.: Computer graphic display method of visualizing three-dimensional biological structures. p1113 30 May 1986.
- Jones, Douglas E. *See* Smith, Edward J.
- Jones, Katherine A.; Kadonaga, James T.; Luciw, Paul A.; Tjian, Robert: Activation of the AIDS retrovirus promoter by the cellular transcription factor, Sp1. p755 9 May 1986.
- Jonker, Margreet. *See* Chatenoud, Lucienne.
- Jordan, Kenneth: review of *Comparison of Ab Initio Quantum Chemistry with Experiment for Small Molecules*, edited by Rodney J. Bartlett. p1559 20 June 1986.
- Jukes, Thomas H.: Vegetables, fruits, and oncologists (letter). p11 4 Apr 1986.
- Jurs, Peter C.: Pattern recognition used to investigate multivariate data in analytical chemistry. p1219 6 June 1986.
- K**
- Kadonaga, James T. *See* Ishii, Shunsuke. *See also* Jones, Katherine A.
- Kamb, Barkley J. *See* Zurawski, Gerard.
- Kamm, Kristine E. and Stull, James T.: Activation of smooth muscle contraction: relation between myosin phosphorylation and stiffness. p80 4 Apr 1986.
- Kanki, Phyllis J.; Barin, Francis; M'Boup, Souleyman; Allan, Jonathan S.; Romet-Lemonne, Jean Loup; Marlinton, Richard; McLane, Mary Frances; Lee, Tun-Hou; Arbeille, Brigitte; Dennis, Francois; Essex, M.: New human T-lymphotropic retrovirus related to simian T-lymphotropic virus type III (STLV-III)_{agm}. p238 11 Apr 1986.
- Kantor, H. L. *See* Balaban, R. S.
- Kardon, Natalie. *See* McDermid, Heather E.
- Karin, Michael. *See* Scholer, Hans.
- Karle, Jerome: Recovering phase information from intensity data. p837 16 May 1986.
- Katayama, Masato. *See* Bowers, William S.
- Kater, Stanley B. *See* Cohan, Christopher S.
- Katz, L. A. *See* Balaban, R. S.
- Kaufman, Daniel L.; McGinnis, James F.; Krieger, Neil R.; Tobin, Allan J.: Brain glutamate decarboxylase cloned in λgt-11: fusion protein produces γ-aminobutyric acid. p1138 30 May 1986.
- Kawai, Yohko. *See* Fay, Philip J.
- Keith, Duane E. *See* Slamon, Dennis J.
- Keith, Jerry M. *See* Locht, Camille.
- Keithly, Jan S. *See* Giannini, Suzanne Holmes.
- Keizer, Hiskias. *See* Spits, Hergen.
- Kelso, Stephen R. and Brown, Thomas H.: Differential conditioning of associative synaptic enhancement in hippocampal brain slices. p85 4 Apr 1986.
- Kennedy, Ronald C.; Eichberg, Jorg W.; Landford, Robert E.; Dreesman, Gordon R.: Anti-idiotypic antibody vaccine for type B viral hepatitis in chimpanzees. p220 11 Apr 1986.
- Kennel, Charles F. *See* Scarf, Frederick L.
- Keroack, Mark and Fields, Bernard N.: Viral shedding and transmission between hosts determined by reovirus L2 gene. p1635 27 June 1986.
- Kerr, Richard A. (news): Another try at forecasting El Niño. p155 11 Apr 1986. Antarctic ozone hole is still deepening. p1602 27 June 1986. Catching a volatile Halley before it's gone. p320 18 Apr 1986. Comet dust closer to home? p322 18 Apr 1986. The continental plates are getting thicker. p933 23 May 1986. Greenhouse warming still coming. p573 2 May 1986. The most complex magnetic field. p1603 27 June 1986. Nevado del Ruiz repeats itself. p1602 27 June 1986. The new look of Halley is black and lumpy. p1343 13 June 1986. The ocean's deserts are blooming. p1345 13 June 1986. Predicted El Niño failing to show. p1604 27 June 1986. Thin-skin tectonics is getting thinner. p1603 27 June 1986. Venus is looking more like Earth than Mars. p709 9 May 1986.
- Keusch, Gerald T. *See* Lev, Boaz.
- Keymer, A. E.: review of *Population Dynamics of Rabies in Wildlife*, edited by Philip J. Bacon. p1152 30 May 1986.
- Khalil, M. A. K. *See* Rasmussen, R. A.
- and Rasmussen, R. A. Interannual variability of atmospheric methane: possible effects of the El Niño-Southern Oscillation. p56 4 Apr 1986.
- Khoury, George. *See* Pozzatti, Rudy.
- Klecker, B. *See* Ipavich, F. M.
- Klopfer, Leopold E.: review of *Science Education in Global Perspective*, edited by Margrete Siebert Klein and F. James Rutherford. p1010 23 May 1986.
- Koblitz, Ann Hibner: review of *Mikhail Vasilievich Lomonosov*, by G. E. Pavlova and A. S. Fedorov. p1042 23 May 1986.
- Koci, B. *See* Mayewski, P. A.
- Kolata, Gina (news): Anthropologists suggest cannibalism is a myth. p1497 20 June 1986. Cancer progress data challenged. p932 23 May 1986. Depression, anorexia, Cushing's link revealed. p1197 6 June 1986. Factoring on microcomputers. p935 23 May 1986. Genetic screening issues studies. p318 18 Apr 1986. Genetic screening raises questions for employers and insurers. p317 18 Apr 1986. Limiting heart attack injury. p1198 6 June 1986. Litigation causes huge price increases in childhood vaccines. p1339 13 June 1986. Manic-depression: is it inherited? p575 2 May 1986. A math image problem. p1087 30 May 1986. Obese children: a growing problem. p20 4 Apr 1986. A perspective on degenerative brain disease. p1197 6 June 1986. Plant biochemistry requires unique tRNA. p1604 27 June 1986. Researchers hunt for Alzheimer's disease gene. p448 25 Apr 1986. Researchers seek melanoma gene. p708 9 May 1986. Where is the AIDS virus harbored? p1197 6 June 1986.
- Kolts, John H. and Delzer, Gary A.: Enhanced ethylene and ethane production with free-radical cracking catalysts. p744 9 May 1986.
- Koonley, A. *See* Brownlee, M.
- Koonin, Steven E.: review of *Frontiers in Nuclear Dynamics*, edited by R. A. Broglia and C. H. Dasso. p409 18 Apr 1986.
- Kopczynski, Jennifer. *See* Bishop, Paul E.
- Koprowski, Hilary. *See* Chao, Moses V. *See also* Herlyn, Dorothee.
- Koshland, Daniel E., Jr. (editorials): Let us meander. p9 4 Apr 1986. The biotechnology issue. p1313 13 June 1986. A "one license—one hearing" policy. p561 2 May 1986. Dealing in hot property. p1585 27 June 1986. The winds of change. p809 16 May 1986. (letter): Issue numbers and librarianship. p919 23 May 1986.
- Krantz, William B. *See* Gleason, Kevin J.
- Kraus, David W. and Colacicino, James M.: Extended oxygen delivery from the nerve hemoglobin of *Tellina alternata* (Bivalvia). p90 4 Apr 1986.
- Krieger, Neil R. *See* Kaufman, Daniel L.
- Krochin, Nadia. *See* Beutler, Bruce.
- Kruger, Lawrence: review of *The Thalamus*, by Edward G. Jones. p1028 23 May 1986.
- Kruglanski, Arie W.: review of *Attribution*, edited by John H. Harvey and Gifford Wear. p665 2 May 1986.
- Krystal, Mark. *See* Buonagurio, Deborah A.
- Kuhar, Michael J. *See* Wong, Dean F.
- Kunlemeier, Cris. *See* Fluehr, Robert.
- Kuipers, A. *See* Jansen, J. H. F.
- Kung, Ching. *See* Hinrichsen, Robert D.
- Kurz, Elizabeth M.; Sengelaub, Dale R.; Arnold, Arthur P.: Androgens regulate the dendritic length of mammalian motoneurons in adulthood. p395 18 Apr 1986.
- Kyriacou, C. P. and Hall, Jeffrey C.: Interspecific genetic control of courtship song production and reception in *Drosophila*. p494 25 Apr 1986.
- Kyte, Frank T. and Wasson, John T.: Accretion rate of extraterrestrial matter: iridium deposited 33 to 67 million years ago. p1225 6 June 1986.

L

- LaBarbera, Michael: review of *Evolutionary Case Histories from the Fossil Record*, edited by J. C. W. Cope and P. W. Skelton. p407 18 Apr 1986.
- Lai, Por H. *See* Souza, Lawrence M.
- Lambright, W. Henry: review of *Lost at the Frontier*, by Deborah Shapley and Rustum Roy. p1015 23 May 1986.
- Lanahan, Anthony A. *See* Chao, Moses V.
- Lanford, Robert E. *See* Kennedy, Ronald C.
- Langbein, J. O. *See* Linker, M. F.
- Langer, William D.: review of *Molecular Astrophysics*, edited by G. H. F. Diercksen, W. F. Huebner, and P. W. Langhoff. p1560 20 June 1986.
- Langs, David A.; Smith, G. David; Stezowski, John J.; Hughes, Robert E.: Structure of presinoic acid: the cyclic moiety of vasopressin. p1240 6 June 1986.
- Larson, Harold P. *See* Mumma, Michael J.
- Larson, John and Lynch, Gary: Induction of synaptic potentiation in hippocampus by patterned stimulation involves two events. p985 23 May 1986.
- Lavi, Enud. *See* Suzumura, Akio.
- Lawn, Richard M. *See* Gitschier, Jane.
- Lazdins, Janis. *See* Faggioni, Alberto.
- Leaton, Robert N. and Supple, William F., Jr.:

- Cerebellar vermis: essential for long-term habituation of the acoustic startle response. p513 25 Apr 1986.
- Lebofsky, Larry A. *See* Sykes, Mark V.
- Lechene, C. *See* Mroz, E. A.
- Lederman, Leon M.: Science must grow. p1096 30 May 1986.
- Lee, Frank D. *See* Zurawski, Gerard.
- Lee, Hyun C. *See* Slamon, Dennis J.
- Lee, Tun-Hou. *See* Kanki, Phyllis J.
- Lefer, Allan M. *See* Darius, Harald.
- Lefer, David J. *See* Darius, Harald.
- Legros, Jean-Jacques. *See* Geenen, Vincent.
- Leonard, Warren J. *See* Greene, Warner C.
- Leonhardt, Barbara A. *See* Raupp, Michael J.
- Lerner, Laura. *See* Bax, Ad.
- Lev, Boaz; Ward, Honorine; Keusch, Gerald T.; Percira, Miercio E. A.: Lectin activation in *Giardia lamblia* by host protease: a novel host-parasite interaction. p71 4 Apr 1986.
- Levy, Jay A. *See* Coffin, John.
- ; Cheng-Mayer, Cecilia; Dina, Dino; Luciw, Paul A. AIDS retrovirus (ARV-2) clone replicates in transfected human and animal fibroblasts. p998 23 May 1986.
- Lewin, Roger (news): Case studies in ecology. p25 4 Apr 1986. "Computer genome" is full of junk DNA. p577 2 May 1986. Did ancient humans make stone caches? p574 2 May 1986. DNA databases are swamped. p1599 27 June 1986. Mountain goat horn: a clue to extinction. p450 25 Apr 1986. Pressures measured in live hip joint. p192 6 June 1986. Proposal to sequence the human genome stirs debate. p1598 27 June 1986. Unexpected size pattern in bacterial proteins. p825 16 May 1986. Why dynamiting vampire bats is wrong. p24 4 Apr 1986.
- Lewis, Alcinda C.: Memory constraints and flower choice in *Pieris rapae*. p863 16 May 1986.
- Li, J. Y. *See* Wood, S. P.
- Lidgard, Scott: Ontogeny in animal colonies: a persistent trend in the bryozoan fossil record. p230 11 Apr 1986.
- Lifson, Jeffrey D.; Reyes, Gregory R.; McGrath, Michael S.; Stein, Barry S.; Engleman, Edgar G.: AIDS retrovirus induced cytopathology: giant cell formation and involvement of CD4 antigen. p1123 30 May 1986.
- Lindstrom, J. M. *See* Henley, J. M.
- Lingappa, Vishwanath R. *See* Perara, Eve.
- Linker, M. F.; Langbein, J. O.; McGarr, A.: Decrease in deformation rate observed by two-color laser ranging in Long Valley caldera. p213 11 Apr 1986.
- Links, Jonathan M. *See* Wong, Dean F.
- Linsey, G. A. *See* Schindler, D. W.
- Liotta, Lance. *See* Pozzatti, Rudy.
- Lippman, Marc E. *See* Dickson, Robert B.
- Livingston, Katherine: review of *Coevolution of Parasitic Arthropods and Mammals*, edited by Ke Chung Kim. p780 9 May 1986. review of *Current Perspectives in Primate Biology*, edited by David M. Taub and Frederick A. King, and *Current Perspectives in Primate Social Dynamics*, edited by David M. Taub and Frederick A. King. p1281 6 June 1986. review of *The Genus Coelomomyces*, edited by John N. Couch and Charles E. Bland. p1281 6 June 1986. review of *The Human Skeleton*, by Pat Shipman, Alan Walker, and David Bichell. p789 9 May 1986. review of *Species and Speciation*, edited by E. S. Vrba. p779 9 May 1986.
- Livingstone, Daniel A.: review of *Late Cainozoic Paleoclimates of the Southern Hemisphere*, edited by J. C. Vogel. p1279 6 June 1986.
- Lobe, Corrinne G.; Finlay, B. Brett; Paranchych, William; Paetkau, Verner H.; Bleackley, R. Chris: Novel serine proteases encoded by two cytotoxic T lymphocyte-specific genes. p858 16 May 1986.
- Locht, Camille and Keith, Jerry M.: Pertussis toxin gene: nucleotide sequence and genetic organization. p1258 6 June 1986.
- Logsdon, John M.: The space shuttle program: a policy failure? p1099 30 May 1986.
- Loh, Wallace D.: review of *Judging the Jury*, by Valerie P. Hans and Neil Vidmar. p1558 20 June 1986.
- Louis, Karen Seashore. *See* Blumenthal, David.
- Lovejoy, C. Owen: review of *Ancestors*, edited by Eric Delson, and *Hominid Evolution*, edited by Phillip V. Tobias, and *Ancestors*, edited by Eric Delson. p1026 23 May 1986.
- Low, Bobbi S.: review of *Evolutionary Ecology of Marsupials*, by Anthon K. Lee and Andrew Cockburn. p111 4 Apr 1986.
- Low, Frank. *See* Sykes, Mark V.
- Lu, Hsieng. *See* Souza, Lawrence M.
- Lucignani, Giovanni. *See* Nelson, Thomas.
- Luciw, Paul A. *See* Jones, Katherine A. *See also* Levy, Jay A.
- Luedke, Christina. *See* Beutler, Bruce.
- Lumpkin, C. K., Jr.; McClung, J. Keith; Pereira-Smith, Olivia M.; Smith, James R.: Existence of high abundance antiproliferative mRNA's in senescent human diploid fibroblasts. p393 18 Apr 1986.
- Luther, George W., III; Church, Thomas M.; Scudlark, Joseph R.; Cosman, Monique: Inorganic and organic sulfur cycling in salt-marsh pore waters. p746 9 May 1986.
- Lux, H. D. *See* Misgeld, U.
- Lynch, Gary. *See* Larson, John.
- Lynn, Dwight E. *See* Hackett, Kevin J.
- Lyons, Philip C.; Plattner, Ronald D.; Bacon, Charles W.: Occurrence of peptide and clavine ergot alkaloids in tall fescue grass. p487 25 Apr 1986.
- Lyons, W. B. *See* Mayewski, P. A.
- Lyzenga, D. R. *See* Beal, R. C.
- ## M
- Mack, Andrew: review of *Nuclear Battlefields*, by William M. Arkin and Richard W. Fieldhouse. p891 16 May 1986.
- Maenhaut, Willy. *See* Andreae, Meinrat O.
- Magenis, Ellen. *See* McDermid, Heather E.
- Magnuson, John J.: review of *Exploitation of Marine Communities*, edited by R. M. May. p1447 13 June 1986.
- Majewska, Maria Dorota; Harrison, Neil L.; Schwartz, Rochelle D.; Barker, Jeffery L.; Paul, Steven M.: Steroid hormone metabolites are barbiturate-like modulators of the GABA receptor. p1004 23 May 1986.
- Makhoul, G. M. *See* Bitar, K. N.
- Manabe, S. and Wetherald, R. T.: Reduction in summer soil wetness induced by an increase in atmospheric carbon dioxide. p626 2 May 1986.
- Mandrup-Poulsen, Thomas. *See* Bendtzen, Klaus.
- Manheim, F. T.: Marine cobalt resources. p600 2 May 1986.
- Maniatis, Tom. *See* Myers, Richard M.
- Mao, H. K. *See* Xu, J. A.
- Marciano, William J.: review of *Shelter Island II*, edited by Roman Jackiw, Nicola N. Khuri, Steven Weinberg, and Edward Witten. p1035 23 May 1986.
- Marder, Victor J. *See* Fay, Philip J.
- Markham, Phil D. *See* Hahn, Beatrice H.
- Marlink, Richard. *See* Kanki, Phyllis J.
- Marshall, Eliot (news): Copyrights obsolete in an electronic age, OTA finds. p572 2 May 1986. Feynman issues his own shuttle report, attacking NASA's risk estimates. p1596 27 June 1986. Fill the oil reserve, academy report says. p441 25 Apr 1986. House policy group reviews science academies. p928 23 May 1986. Imported chips: a security risk? p12 4 Apr 1986. Library cutbacks: an information deficit. p700 9 May 1986. Nuclear meltdown: a calculated (and recalculated) risk. p153 11 Apr 1986. Reactor explodes amid Soviet silence. p814 16 May 1986. Science and engineering academies elect new officers. p571 2 May 1986.
- Martin, R. L.; Wood, C.; Bachr, W.; Applebury, M. L.: Visual pigment homologies revealed by DNA hybridization. p1266 6 June 1986.
- Marx, Jean L. (news): AIDS virus has new name—perhaps. p699 9 May 1986. The continuing saga of "homeo-madness." p158 11 Apr 1986. Gene therapy—so near and yet so far away. p824 16 May 1986. Lost neurons identified in Alzheimer's disease. p1501 20 June 1986. Nerve activity alters neurotransmitter synthesis. p1500 20 June 1986. Nerve growth factor acts in brain. p1341 13 June 1986. New relatives of AIDS virus found. p157 11 Apr 1986. Trophic factor aids synapse formation. p1501 20 June 1986. The yin and yang of cell growth control. p1093 30 May 1986.
- Mascarenhas, Y. *See* Wood, S. P.
- May, Michael M.: Safeguarding our military space systems. p336 18 Apr 1986.
- Mayewski, P. A.; Lyons, W. B.; Spencer, M. J.; Twickler, M.; Dansgaard, W.; Koci, B.; Davidson, C. I.; Honrath, R. E.: Sulfate and nitrate concentrations from a south Greenland ice core. p975 23 May 1986.
- M'Boup, Souleyman. *See* Kanki, Phyllis J.
- McCann, Monica J. *See* Verbalis, Joseph G.
- McClung, J. Keith. *See* Lumpkin, C. K., Jr.
- McComas, D. J. *See* Bame, S. J.
- McDermid, Heather E.; Duncan, Alessandra, M. V.; Brasch, Klaus R.; Holden, Jeannette J. A.; Magenis, Ellen; Sheehy, Robert; Burn, John; Kardon, Nataline; Noel, Bernard; Schinzel, Albert; Teshima, Ikuko; White, Bradley N.: Characterization of the supernumerary chromosome in cat eye syndrome. p646 2 May 1986.
- McGarr, A. *See* Linker, M. F.
- McGinnis, James F. *See* Kaufman, Daniel L.
- McGrath, Michael S. *See* Lifson, Jeffrey D.
- McHale, Colleen M. *See* Verbalis, Joseph G.
- McIntosh, Kevin R. and Drachman, Daniel B.: Induction of suppressor cells specific for AChR in experimental autoimmune myasthenia gravis. p401 18 Apr 1986.
- McLane, Mary Frances. *See* Kanki, Phyllis J.
- McLoon, Linda Kirsch: review of *Neural Transplantation and Regeneration*, edited by Gopal D. Das and Robert B. Wallace. p892 16 May 1986.
- McManaway, Mary E. *See* Dickson, Robert B.
- McPherson, Alexander; Brayer, Gary; Cascio, Duilio; Williams, Roger: The mechanism of binding of a polynucleotide chain to pancreatic ribonuclease. p765 9 May 1986.
- Meetre, C. *See* Meyer-Vernet, N.
- Melack, John M.: review of *An Ecosystem Approach to Aquatic Ecology*, edited by Gene E. Likens. p1031 23 May 1986.
- Melera, Peter W. *See* Scotto, Kathleen W.
- Mendis, D. Asoka. *See* Smith, Edward J.
- Merlino, Glenn T. *See* Ishii, Shunsuke.
- Merrifield, Bruce: Solid phase synthesis. p341 18 Apr 1986.
- Mertelsmann, Roland. *See* Souza, Lawrence M.

- Metcalf, P. *See* Durbin, R. M.
- Meyer-Vernet, N.; Couturier, P.; Hoang, S.; Perche, C.; Steinberg, J. L.; Fainberg, J.; Meetre, C.: Plasma diagnosis from thermal noise and limits on dust flux or mass in comet Giacobini-Zinner. p370 18 Apr 1986.
- Migita, Shunsuke. *See* Yamamoto, Ken-ichi.
- Milan, Frank Rivera. *See* Raupp, Michael J.
- Millar, Robert P.; Wormald, Patricia J.; Milton, Raymond C. de L.: Stimulation of gonadotropin release by a non-GnRH peptide sequence of the GnRH precursor. p68 4 Apr 1986.
- Milner, Angela C. *See* Charig, Alan J.
- Milsark, Ian W. *See* Beutler, Bruce.
- Milton, Raymond C. de L. *See* Millar, Robert P.
- Mimura, K.: Development of visual pattern discrimination in the fly depends on light experience. p83 4 Apr 1986.
- Minowada, Jun. *See* Erikson, Jan.
- Misgeld, U.; Deisz, R. A.; Dodt, H. U.; Lux, H. D.: The role of chloride transport in postsynaptic inhibition of hippocampal neurons. p1413 13 June 1986.
- Mizel, Steven B. *See* Perlmutter, David H.
- Mochizuki, Diane Y. *See* Grabstein, Kenneth H.
- Monaldo, F. M. *See* Beal, R. C.
- Montagnier, Luc. *See* Coffin, John.
- Montgomery, Robert R. *See* Fay, Philip J.
- Moore, Malcolm A. S. *See* Souza, Lawrence M.
- Morawski, Jill G.: review of *Points of View in the Modern History of Psychology*, edited by Claude E. Buxton. p1447 13 June 1986.
- Morgan, M. Granger: Risk research: when should we say "enough"? (editorial). p917 23 May 1986.
- Moran, Richard E. *See* Nelson, D. E.
- Morton, W. Brown, Jr.: Cells, patients' rights, and researchers' responsibilities (letter). p698 9 May 1986.
- Moser, John C. *See* Blackwell, Meredith.
- Moulai, J. *See* Durbin, R. M.
- Mowat, Noel. *See* DiMarchi, Richard.
- Mroz, E. A. and Lechene, C.: Pancreatic zymogen granules differ markedly in protein composition. p871 16 May 1986.
- Mumma, Michael J.; Weaver, Harold A.; Larson, Harold P.; Davis, D. Scott; Williams, Michael: Detection of water vapor in Halley's comet. p1523 20 June 1986.
- Murdock, Douglas C. *See* Souza, Lawrence M.
- Murray, David F.: review of *Beringia in the Cenozoic Era*, edited by V. L. Kontrimavichus. p533 25 Apr 1986.
- Muschel, Ruth. *See* Pozzatti, Rudy.
- Myerowitz, Rachel and Hogikyan, Norman D.: Different mutations in Ashkenazi Jewish and non-Jewish French Canadians with Tay-Sachs disease. p1646 27 June 1986.
- Myers, Richard M.; Tilly, Kit; Maniatis, Tom: Fine structure genetic analysis of a β -globin promoter. p613 2 May 1986.
- ## N
- Nagy, Ferenc. *See* Flühr, Robert.
- Nakada, Susumu. *See* Buonagurio, Deborah A.
- Narod, B. Barry: review of *Radioglaciology*, by V. V. Bogorodsky, C. R. Bentley, and P. E. Gudmansen. p1153 30 May 1986.
- Nathans, Jeremy; Piantanida, Thomas P.; Eddy, Roger L.; Shows, Thomas B.; Hogness, David S.: Molecular genetics of inherited variation in human color vision. p203 11 Apr 1986.
- Nathans, Jeremy; Thomas, Darcy; Hogness, David S.: Molecular genetics of human color vision: the genes encoding blue, green, and red pigments. p193 11 Apr 1986.
- Naylor, Paul H. *See* Sarin, Prem S.
- Neale, Walter C.: Real costs (letter). p810 16 May 1986.
- Neilson, Ronald P.: High-resolution climatic analysis and southwest biogeography. p27 4 Apr 1986.
- Nelson, Craig E. *See* Romero, Gustavo A.
- Nelson, D. E.; Morlan, Richard E.; Vogel, J. S.; Southon, J. R.; Harington, C. R.: New dates on northern Yukon artifacts: Holocene not upper Pleistocene. p749 9 May 1986.
- Nelson, J. *See* Denniston, K. J.
- Nelson, Richard S. *See* Abel, Patricia Powell.
- Nelson, Thomas; Lucignani, Giovanni; Sokoloff, Louis: Measurement of brain deoxyglucose metabolism by NMR. p776 9 May 1986.
- Nerup, Jørn. *See* Bendtsen, Klaus.
- Nester, Eugene W. *See* Bolton, George W.
- Nielsen, Jens H. *See* Bendtsen, Klaus.
- Nishikura, Kazuko. *See* Erikson, Jan.
- Noel, Bernard. *See* McDermid, Heather E.
- Nordstrom, Darrell Kirk and Ball, James W.: The geochemical behavior of aluminum in acidified surface waters. p54 4 Apr 1986.
- Norman, Colin (news): AIDS patent negotiations break down. p819 16 May 1986. . . But they endorse the supercollider. p705 9 May 1986. Creationism case goes to Supreme Court. p928 23 May 1986. Hazy picture of Chernobyl emerging. p1331 13 June 1986. House science committee chairman leaving Congress. p18 4 Apr 1986. McTague quits White House post. p1185 6 June 1986. Military AIDS testing offers research bonus. p818 16 May 1986. A new twist in AIDS patent fight. p308 18 Apr 1986. OMB floats new indirect cost plan. p1494 20 June 1986. OMB offers to delay indirect cost cuts. p17 4 Apr 1986. Packard report makes a plea for universities. p1085 30 May 1986. Science adviser named. p1489 20 June 1986. Uranium enrichment's \$7-billion uncertainty. p312 18 Apr 1986.
- Nowell, Peter C. *See* Erikson, Jan.
- Nussenzweig, Ruth S. *See* Ferreira, Arturo.
- Nussenzweig, Victor. *See* Ferreira, Arturo.
- ## O and P
- Ogawara, Hiroshi. *See* Akiyama, Tetsu.
- Ogilvie, Keith W.; Coplan, M. A.; Bochsler, P.; Geiss, J.: Ion composition results during the International Cometary Explorer encounter with Giacobini-Zinner. p374 18 Apr 1986.
- Ohlsson-Wilhelm, Betsy M. *See* Fay, Philip J.
- Olson, Maynard V. *See* Carle, Georges F.
- Onodera, Akifumi; Furuno, Katsuhisa; Yazu, Shuji: Synthetic diamond as a pressure generator. p1419 13 June 1986.
- Orkin, Stuart H. *See* Fay, Philip J.
- Oroszlan, Steven. *See* Coffin, John.
- Oswald, R. E. *See* Henley, J. M.
- Padmanabhan, Raji. *See* Pozzatti, Rudy.
- Paetkau, Verner H. *See* Lobe, Corrinne G.
- Paine, Lynn: review of *The Schooling of China*, by John Cleverley. p1011 23 May 1986.
- Palese, Peter. *See* Buonagurio, Deborah A.
- Paranchych, William. *See* Lobe, Corrinne G.
- Parashar, Aruna. *See* Taraschi, Theodore F.
- Pardue, Arthur B. *See* Schlegel, Robert.
- Parkman, Robertson: The application of bone marrow transplantation to the treatment of genetic diseases. p1373 13 June 1986.
- Parks, Elizabeth S. *See* Hahn, Beatrice H.
- Parks, Wade P. *See* Hahn, Beatrice H.
- Parvin, Jeffrey D. *See* Buonagurio, Deborah A.
- Pastan, Ira. *See* Ishii, Shunsuke. *See also* Shen, D.-w.
- Paterson, Yvonne. *See* Jemmerson, Ronald.
- Paul, Steven M. *See* Majewska, Maria Dorota.
- Pedersen, Kaj Raunsgaard. *See* Crane, Peter R.
- Peffer, Nancy J. *See* Greene, Warner C.
- Penston, Margaret: Royal Greenwich Observatory (letter). p1319 13 June 1986.
- Perera, Eve; Rothman, Richard E.; Lingappa, Vishwanath R.: Uncoupling translocation from translation: implications for transport of proteins across membranes. p348 18 Apr 1986.
- Perche, C. *See* Meyer-Vernet, N.
- Pereira, Miercio E. A. *See* Lev, Boaz.
- Pereira-Smith, Olivia M. *See* Lumpkin, C. K., Jr.
- Perlmutter, David H.; Goldberger, Gabriel; Dinalollo, Charles A.; Mizel, Steven B.; Colten, Harvey R.: Regulation of class III major histocompatibility complex gene products by interleukin-1. p850 16 May 1986.
- Perry, Thelma J. *See* Blackwell, Meredith.
- Phillips, O. M.: review of *Turbulence in the Ocean*, by A. S. Monin and R. V. Oozmidov. p779 9 May 1986.
- Piantanida, Thomas P. *See* Nathans, Jeremy (p203).
- Pickett, Betty H.: High school scientists (letter). p145 11 Apr 1986.
- Pilachowski, Catherine A.: review of *Cool Stars with Excesses of Heavy Elements*, edited by Mercedes Jaschek and Philip C. Keenan. p270 11 Apr 1986.
- Pincus, Harold Alan: Research on mental illness and addictive disorders (letter). p307 18 Apr 1986.
- Pings, Cornelius J.: A time for steadiness (editorial). p437 25 Apr 1986.
- Pipeleers, D. G. *See* Schuit, F. C.
- Pipkin, Francis M.: review of *The Fundamental Physical Constants and the Frontier of Measurement*, by B. W. Petley. p1037 23 May 1986.
- Pitcher, Wayne H., Jr. *See* Weetall, Howard H.
- Pitts, J. E. *See* Wood, S. P.
- Plattner, Ronald D. *See* Lyons, Philip C.
- Platzer, Erich. *See* Souza, Lawrence M.
- Plott, Charles R.: Laboratory experiments in economics: the implications of posted-price institutions. p732 9 May 1986.
- Popovic, Mikulas. *See* Gilden, Raymond V.
- Postma, Herman: Federal research funding: open competition (letter). p563 2 May 1986.
- Pough, F. Harvey: review of *Biology of Australasian Frogs and Reptiles*, edited by Gordon Grigg, Richard Shine, and Harry Ehmann. p533 25 Apr 1986.
- Pozzatti, Rudy; Muschel, Ruth; Williams, Jeanne; Padmanabhan, Raji; Howard, Bruce; Liotta, Lance; Khouri, George: Primary rat embryo cells transformed by one or two oncogenes show different metastatic potentials. p223 11 Apr 1986.
- Premakumar, R. *See* Bishop, Paul E.
- Press, Frank: Quality of intramural research (letter). p919 23 May 1986.
- Price, Virginia L. *See* Grabstein, Kenneth H.
- Prinsenberg, S. J. *See* Conover, R. J.
- Provost, Thomas T. *See* Harley, John B.
- Pruchnicki, Alex. *See* Wolozin, Benjamin L.
- Purdie, Duncan A. *See* Ducklow, Hugh W.
- Putney, J. W., Jr. *See* Bitar, K. N.
- ## Q and R
- Quackenbush, Robert L. *See* Dilts, Judith A.
- Quigley, Gary J.; Uggetto, Giovanni; van der Marel, Gijs A.; van Boom, Jacques H.; Wang, Andrew H.-J.; Rich, Alexander: Non-Watson-Crick G · C and A · T base pairs in a DNA-antibiotic complex. p1255 6 June 1986.
- Rakic, Pasko; Bourgeois, Jean-Pierre; Eckenhoff, Maryellen F.; Cezevic, Nada; Goldman-Rakic, Patricia S.: Concurrent overproduction of syn-

- apses in diverse regions of the primate cerebral cortex. p232 11 Apr 1986.
- Rasmussen, R. A. *See Khalil*, M. A. K.
- and Khalil, M. A. K. Atmospheric trace gases: trends and distributions over the last decade. p1623 27 June 1986.
- Ratchford, J. Thomas. *See Carey*, William D.
- Raupp, Michael J.; Milan, Frank Rivera; Barbosa, Pedro; Leonhardt, Barbara A.: Methylcyclopentanoid monoterpenes mediate interactions among insect herbivores. p1408 13 June 1986.
- Redfield, Robert R. *See Hahn*, Beatrice H.
- Reichlin, Morris. *See Harley*, John B.
- Renlund, Martin; Tietze, Frank; Gahl, William A.: Defective sialic acid egress from isolated fibroblast lysosomes of patients with Salla disease. p759 9 May 1986.
- Reppert, Steven M. *See Uhl*, George R.
- Reyes, Gregory R. *See Lifson*, Jeffrey D.
- Reynolds, Ian J. *See Wagner*, John A.
- Rhim, Johng S.; Fujita, Jun; Arnstein, Paul; Aaronson, Stuart A.: Neoplastic conversion of human keratinocytes by adenovirus 12-SV40 virus and chemical carcinogens. p385 18 Apr 1986.
- Rice, Stuart A.: Fight the edifice complex. p1096 30 May 1986.
- Rich, Alexander. *See Quigley*, Gary J.
- Richert, N. *See Shen*, D.-w.
- Rieke, George: European space telescope (letter). p1487 20 June 1986.
- Rigby, J. Keith, Jr. *See Sloan*, Robert E.
- Rizzo, Thomas M. *See Bishop*, Paul E.
- Roberts, Michael M.; White, Janice L.; Grunter, Markus G.; Burnett, Roger M.: Three-dimensional structure of the adenovirus major coat protein hexon. p1148 30 May 1986.
- Robinson, Arthur L. (news): Atoms in strong laser fields obey the rules. p1193 6 June 1986. Can synchrotron light save the chip industry? p22 4 Apr 1986. Charge density waves seen in potassium. p713 9 May 1986. Consensus on silicon surface structure near. p451 25 Apr 1986. Prospects for physics in the 1990's surveyed. p156 11 Apr 1986. A silicon solution for gallium arsenide IC's. p826 16 May 1986. STM evidence for silicon (111). p453 25 Apr 1986. U.S. electronics needs new strategy. p1496 20 June 1986. Wisconsin synchrotron ring back in business. p1190 6 June 1986.
- Robinson, Scott K.: review of *Blackbirds of the Americas*, by Gordon H. Orians. p1030 23 May 1986.
- Rogers, Stephen G. *See Abel*, Patricia Powell.
- Romero, Gustavo A. and Nelson, Craig E.: Sexual dimorphism in *Catasetum* orchids: forcible pollen emplacement and male flower competition. p1538 20 June 1986.
- Romer-Lemonne, Jean Loup. *See Kanki*, Phyllis J.
- Roninson, I. B. *See Shen*, D.-w.
- Rosen, Craig A. *See Greene*, Warner C.
- Rosenzweig, Robert M.: Subsidizing research: role of the university. p1508 20 June 1986.
- Ross, Alonso H. *See Chao*, Moses V. *See also Herlyn*, Dorothee.
- Rothblatt, Sheldon: review of *Applying the Humanities*, edited by Daniel Callahan. Arthur L Caplan, and Bruce Jennings. p1013 23 May 1986.
- Rothman, Richard E. *See Perera*, Eve.
- Rovigatti, Ugo; Watson, Dennis K.; Yunis, Jorge J.: Amplification and rearrangement of *Hu-ets-1* in leukemia and lymphoma with involvement of 11q23. p398 18 Apr 1986.
- Roy, Rustum: The SSC and a balanced budget (letter). p1183 6 June 1986.
- Rubin, Harvey. *See Taraschi*, Theodore F.
- Russell, David W. *See Yamamoto*, Tokuo.
- Ruttan, Vernon W.: Real costs (letter). p810 16 May 1986.
- Ryan, Michael J.: review of *Biology of Amphibians*, by William E. Duellman and Linda Trueb. p271 11 Apr 1986.
- Rysavy, Joseph A. *See Hohmann*, Elizabeth L.
- S**
- Saluhuddin, S. Z. *See Hahn*, Beatrice H.
- Sander, T. *See Schober*, R.
- Sanderson, T. R. *See Hynds*, R. J.
- Santisteban, Antonio. *See Jiménez*, Javier.
- Sarin, Prem S.; Sun, Daisy K.; Thornton, Arthur H.; Naylor, Paul H.; Goldstein, Allan L.: Neutralization of HTLV-III/LAV replication by antiserum by thymosin α_1 . p1135 30 May 1986.
- Sarngadharan, M. G. *See Gilden*, Raymond V.
- Sastray, B. R.; Goh, J. W.; Auyeung, A.: Associative induction of posttetanic and long-term potentiation in CA1 neurons of rat hippocampus. p988 23 May 1986.
- Sawyer, Jeffrey R. and Hozier, John C.: High resolution of mouse chromosomes: banding conservation between man and mouse. p1632 27 June 1986.
- Scarf, Frederick L.; Coroniti, Ferdinand V.; Kenkel, Charles F.; Gurnett, Donald A.; Ip, Wing-Huen; Smith, Edward J.: Plasma wave observations at comet Giacobini-Zinner. p377 18 Apr 1986.
- Schafer, Henry F., III: Methylene: experiment and theory (letter). p1319 13 June 1986.
- Scheiber, Harry N.: review of *The Telephone Enterprise*, by Robert W. Garnet. *The Anatomy of a Business Strategy*, by George David Smith; and *From Invention to Innovation*, by Neil H. Wasserman. p1016 23 May 1986.
- Schellekens, Huub. *See Ferreira*, Arturo.
- Scher, William: Serine proteases (letter). p145 11 Apr 1986.
- Schindler, D. W.; Turner, M. A.; Stainton, M. P.; Linsey, G. A.: Natural sources of acid neutralizing capacity in low alkalinity lakes of the Precambrian Shield. p844 16 May 1986.
- Schindler, Melvin. *See Wade*, Margaret H.
- Schinzel, Albert. *See McDermid*, Heather E.
- Schittoni, Mario. *See Giannini*, Suzanne Holmes.
- Schlegel, Robert and Pardee, Arthur B.: Caffeine-induced uncoupling of mitosis from the completion of DNA replication in mammalian cells. p1264 6 June 1986.
- Schober, R.; Ulrich, F.; Sander, T.; Durselen, H.; Hessel, S.: Laser-induced alteration of collagen substructure allows microsurgical tissue welding. p1421 13 June 1986.
- Schofield, Louis. *See Ferreira*, Arturo.
- Scholer, Hans; Haslinger, Alois; Heguy, Adriana; Holzgreve, Heidi; Karin, Michael: In vivo competition between a metallothionein regulatory element and the SV40 enhancer. p76 4 Apr 1986.
- Scholer, M. *See Ippavich*, F. M.
- Schreiber, Alain B.; Winkler, Marjorie E.; Derynck, Rik: Transforming growth factor- α : a more potent angiogenic mediator than epidermal growth factor. p1250 6 June 1986.
- Schuit, F. C. and Pipeleers, D. G.: Differences in adrenergic recognition by pancreatic A and B cells. p875 16 May 1986.
- Schwartz, Rochelle D. *See Majewska*, Maria Dorota.
- Scotto, Kathleen W.; Biedler, June L.; Meleira, Peter W.: Amplification and expression of genes associated with multidrug resistance in mammalian cells. p751 9 May 1986.
- Scudlark, Joseph R. *See Luther*, George W., III.
- Sears, William R.; Sheila E. Widnall: president-elect of AAAS. p1199 6 June 1986.
- Seeger, Christoph; Ganem, Don; Varma, Harold E.: Biochemical and genetic evidence for the hepatitis B virus replication strategy. p477 25 Apr 1986.
- Seeger, Robert C. *See Slamon*, Dennis J.
- Sehgal, Amita. *See Chao*, Moses V.
- Sengelaub, Dale R. *See Kurz*, Elizabeth M.
- Settle, M. *See Elachi*, Charles.
- Shadlen, Michael and Carney, Thom: Mechanisms of human motion perception revealed by a new cyclopean illusion. p95 4 Apr 1986.
- Shaw, George M. *See Hahn*, Beatrice H.
- Sheehy, Robert. *See McDermid*, Heather E.
- Shen, D.-w.; Fojo, A.; Chin, J. E.; Roninson, I. B.; Richert, N.; Pastan, I.; Gottesman, M. M.: Human multidrug-resistant cell lines: increased *mdrl* expression can precede gene amplification. p643 2 May 1986.
- Shiroo, Masahiro. *See Yamamoto*, Ken-ichi.
- Show, Thomas B. *See Nathans*, Jeremy (p203).
- Shultz, Leonard D. *See Sidman*, Charles L.
- Shuman, Marc A. *See Gitschier*, Jane.
- Sidman, Charles L.; Shultz, Leonard D.; Hardy, Richard R.; Hayakawa, Kyoko; Herzenberg, Lee A.: Production of immunoglobulin isotypes by Ly-1+ B cells in viable mortheaten and normal mice. p1423 13 June 1986.
- Siegel, Daniel M.: review of *From Maxwell to Murophysics*, by Jed Z. Buchwald. p532 25 Apr 1986.
- Siekevitz, Philip: "Disloyalty" and DOD funding (letter). p1183 6 June 1986.
- Silberberg, Donald H. *See Suzumura*, Akio.
- Silk, Joseph: review of *The Anthropic Cosmological Principle*, by John D. Barrow and Frank J. Tipler. p1036 23 May 1986.
- Singer, S. Fred (letters). NAS acid rain study. p563 2 May 1986. The strategic petroleum reserve. p1587 27 June 1986.
- Siscoe, George L. *See Smith*, Edward J.
- Slamon, Dennis J.; Boone, Thomas C.; Seeger, Robert C.; Keith, Duane E.; Chazin, Vicki; Lee, Hyun C.; Souza, Lawrence M.: Identification and characterization of the protein encoded by the human N-myc oncogene. p768 9 May 1986.
- Slavin, James A. *See Smith*, Edward J.
- Sloan, Robert E.; Rigby, J. Keith, Jr.; Van Valen, Leigh M.; Gabriel, Diane: Gradual dinosaur extinction and simultaneous ungulate radiation in the Hell Creek Formation. p629 2 May 1986.
- Smedile, A. *See Denniston*, K. J.
- Smith, Bruce L. R.: review of *Private Sectors in Higher Education*, by Roger L. Geiger. p1008 23 May 1986.
- Smith, Charles D.; Cox, C. Christine; Snyderman, Ralph: Receptor-coupled activation of phosphoinositide-specific phospholipase C by an N protein. p97 4 Apr 1986.
- Smith, Earl L., III. *See Harwerth*, Ronald S.
- Smith, Edward J. *See Scarf*, Frederick L.
- ; Tsurutani, Bruce T.; Slavin, James A.; Jones, Douglas E.; Siscoe, George L.; Mendis, D. Asoka: International Cometary Explorer encounter with Giacobini-Zinner: magnetic field observations. p382 18 Apr 1986.
- Smith, G. David. *See Langs*, David A.
- Smith, J. Bryan. *See Darius*, Harald.
- Smith, James R. *See Lumpkin*, C. K., Jr.
- Smith, Malcolm G.: review of *Astrophysics of Active Galaxies and Quasi-Stellar Objects*, edited by Joseph S. Miller. p112 4 Apr 1986.
- Smith, R. Graham. *See Fell*, H. Perry.
- Smith, R. Jeffrey (news): Binary deployment remains controversial. p568 2 May 1986. DOD

- backtracks on grants to SDI critics. p929 23 May 1986. DOD declines to consider impact of nuclear winter. p1088 30 May 1986. Fletcher promises rebirth of shuttle program. p706 9 May 1986. GAO backs decision to conduct x-ray laser test. p1495 20 June 1986. GAO blasts Bigeye chemical weapon. p1493 20 June 1986. Hicks attacks SDI critics. p444 25 Apr 1986. Inquiry faults shuttle management. p1488 20 June 1986. Midgetman missile plans generate political debate. p1186 6 June 1986. MIT president attacks federal research priorities. p1333 13 June 1986. MIT's relationship with DOD lab criticized. p1191 6 June 1986. Mobile missile design generates controversy. p1590 27 June 1986. NAS signs new pact with Soviet academy. p315 18 Apr 1986. New shuttle director promises emphasis on safety. p153 11 Apr 1986. Packard panel urges reforms. p445 25 Apr 1986. Pentagon's R&D chief roils the water. p443 25 Apr 1986. A scheme to attract missiles and deter an attack. p1592 27 June 1986. Soviet, U.S. scientists reach seismic agreement. p1388 13 June 1986. Titan accident disrupts military space program. p702 9 May 1986. U.S. official defends SALT II decision. p1334 13 June 1986. A worrisome shift in nuclear strategy. p1187 6 June 1986. X-ray laser budget grows as public information declines. p152 11 Apr 1986.
- Smith, Robert L.: review of *Sexual Selection and Animal Genitalia*, by William G. Eberhard. p1029 23 May 1986.
- Smith, W. O. See Ainley, D. G.
- Snow, Allison A. See Stanton, Maureen L.
- Snyder, Solomon H. See Wagner, John A.
- Snyderman, Ralph. See Smith, Charles D.
- Sodroski, Joseph G. See Greene, Warner C.
- Sokal, Michael M.: review of *The Origins of Behaviorism*, by John M. O'Donnell. p664 2 May 1986.
- Sokoloff, Louis. See Nelson, Thomas.
- Soltvedt, Brook Chase. See Hinrichsen, Robert D.
- Sonnenfeld, Richard and Hansma, Paul K.: Atomic-resolution microscopy in water. p211 11 Apr 1986.
- Sørensen, J. See Wilson, T. R. S.
- Southon, J. R. See Nelson, D. E.
- Souza, Lawrence M. See Slamon, Dennis J.
- _____, Boone, Thomas C.; Gabrilove, Janice; Lai, Por H.; Zsebo, Krisztina M.; Murdock, Douglas C.; Chazin, Vicki R.; Bruszewski, Joan; Lu, Hsieng; Chen, Kenneth K.; Barendt, Jean; Platzer, Erich; Moore, Malcolm A. S.; Mertelsmann, Roland; Welte, Karl: Recombinant human granulocyte colony-stimulating factor: effects on normal and leukemic myeloid cells. p61 4 Apr 1986.
- Spencer, D. F.; Alpert, S. B.; Gilman, H. H.: Cool water: demonstration of a clean and efficient new coal technology. p609 2 May 1986.
- Spencer, M. J. See Mayewski, P. A.
- Spits, Hergen; van Schooten, Wim; Keizer, Hiskias; van Seventer, Gys; van de Rijn, Matthijs; Terhorst, Cox; de Vries, Jan E.: Alloantigen recognition is preceded by nonspecific adhesion of cytotoxic T cells and target cells. p403 18 Apr 1986.
- Squire, Larry R.: Mechanisms of memory. p1612 27 June 1986.
- Stainton, M. P. See Schindler, D. W.
- Stanton, Maureen L.; Snow, Allison A.; Hañdel, Steven H.: Floral evolution: attractiveness to pollinators increases male fitness. p1625 27 June 1986.
- Stein, Barry S. See Lifson, Jeffrey D.
- Steinberg, J. L. See Meyer-Vernet, N.
- Steneck, Robert S.: review of *The Ecology of Rocky Coasts*, edited by P. G. Moore and R. Seed. p1652 27 June 1986.
- Sterten, DeWitt, Jr.: Publication: numbers and quality (letter). p11 4 Apr 1986.
- Stezowski, John J. See Langs, David A.
- Storms, Hedwig. See Andreac, Meinrat O.
- Stoto, Michael A. See Blumenthal, David.
- Stricker, Edward M. See Verbalis, Joseph G.
- Stull, James T. See Kamm, Kristine E.
- Sudo, Chie. See Akiyama, Tetsu.
- Suess, Erwin: review of *Geochemistry of Organic Matter in the Ocean*, by Evgenii A. Romanovich. p1032 23 May 1986.
- Sullivan, C. W. See Ainley, D. G.
- Sun, Daisy K. See Sarin, Prem S.
- Sun, Lee. See Erikson, Jan.
- Sun, Marjorie (news): Agricultural firms seek more patent protection. p151 11 Apr 1986. Antagonists agree on pesticide law reform. p16 4 Apr 1986. EPA approves second genetic test. p1088 30 May 1986. EPA reduces penalty against biotech firm. p1495 20 June 1986. EPA suspends biotech permit. p15 4 Apr 1986. Federal VDT study finally wins approval. p1594 27 June 1986. Field test of altered microbe still in limbo. . . . p1340 13 June 1986. Ground water ills: many diagnoses, few remedies. p1490 20 June 1986. NIH plans probe on test of altered virus. p821 16 May 1986. USDA biotechnology review criticized and defended. p316 18 Apr 1986. USDA suspends license for engineered vaccine. p446 25 Apr 1986. . . . While first outdoor test of engineered plant begins. p1340 13 June 1986. White House to release biotechnology guidelines. p1189 6 June 1986. (letter): Biotechnology center. p1080 30 May 1986.
- Supple, William F., Jr. See Leaton, Robert N.
- Suzumura, Akio; Lavi, Ehud; Weiss, Susan R.; Silberberg, Donald H.: Coronavirus infection induces H-2 antigen expression on oligodendrocytes and astrocytes. p991 23 May 1986.
- Svenson, Morten. See Bendzen, Klaus.
- Svetlik, Penny B. See Greene, Warner C.
- Swift, R. N. See Beal, R. C.
- Sykes, Mark V.; Lebofsky, Larry A.; Hunten, Donald M.; Low, Frank: The discovery of dust trails in the orbits of periodic comets. p1115 30 May 1986.
- T-V**
- Tannenbaum, Gloria Shaffer: Effects of growth hormone-releasing factor in the brain. p1272 6 June 1986.
- Taraschi, Theodore F.; Parashar, Aruna; Hooks, Mary; Rubin, Harvey: Perturbation of red cell membrane structure during intracellular maturation of *Plasmodium falciparum*. p102 4 Apr 1986.
- Taylor, Fritz: review of *Seasonal Adaptations of Insects*, by Maurice J. Tauber, Catherine A. Tauber, and Sinzo Masaki. p1152 30 May 1986.
- Taylor, Maria E. See Hahn, Beatrice H.
- Teich, Natalie. See Coffin, John.
- Temin, Howard. See Coffin, John.
- Terhorst, Cox. See Spits, Hergen.
- Teshima, Ikuko. See McDermid, Heather E.
- Thatcher, Wayne: review of *Earthquake Prediction*, by Kiyoo Mogi. p408 18 Apr 1986.
- Thelen, Esther: "Tradition" questioned (letter). p1183 6 June 1986.
- Thomas, Darcy. See Nathans, Jeremy (p193).
- Thomas, Gary; Herbert, Edward; Hruby, Dennis E.: Expression and cell type-specific processing of human preproenkephalin with a vaccinia recombinant. p1641 27 June 1986.
- Thompson, D. R. See Gasparovic, R. F.
- Thomsen, M. F. See Bame, S. J.
- Thomson, J. See Wilson, T. R. S.
- Thornton, Arthur H. See Sarin, Prem S.
- Tickle, I. J. See Wood, S. P.
- Tietze, Frank. See Renlund, Martin.
- Tilley, D. G. See Beal, R. C.
- Tilly, Kit. See Myers, Richard M.
- Tischer, Edmund. See DasSarma, Shiladitya.
- Tjian, Robert. See Ishii, Shunsuke. See also Jones, Katherine A.
- Tobin, Allan J. See Kaufman, Daniel L.
- Tochko, J. S. See Gasparovic, R. F.
- Torres, J. J. See Ainley, D. G.
- Tosteson, Daniel C. See Brugnara, Carlo.
- Toyoshima, Kumao. See Akiyama, Tetsu. See also Coffin, John.
- Treharne, A. M. See Wood, S. P.
- Trigger, Bruce G.: review of *Cultures in Contact*, edited by William W. Fitzhugh. p1023 23 May 1986.
- Troelstra, S. R. See Jansen, J. H. F.
- Trosko, James E. See Wade, Margaret H.
- Trumbull, Richard: Directions in research (letter). p145 11 Apr 1986.
- Tsurutani, Bruce T. See Smith, Edward J.
- Tucker, Philip W. See Fell, H. Perry.
- Turner, Christy G., II: Dentochronological separation estimates for Pacific rim populations. p1140 30 May 1986.
- Turner, M. A. See Schindler, D. W.
- Tushinski, Robert J. See Grabstein, Kenneth H.
- Twickler, M. See Mayewski, P. A.
- Tyagi, Som D. See Finegold, Leonard X.
- Uberbacher, Edward C.; Harp, Joel M.; Wilkinson-Singley, Elizabeth; Bunick, Gerard J.: Shape analysis of the histone octamer in solution. p1247 6 June 1986.
- Ughetto, Giovanni. See Quigley, Gary J.
- Uhl, George R. and Reppert, Steven M.: Suprachiasmatic nucleus vasopressin messenger RNA: circadian variation in normal and Brattleboro rats. p390 18 Apr 1986.
- Ulrich, F. See Schober, R.
- Ulrich, P. See Brownlee, M.
- Umbreit, Thomas H.; Hesse, Elizabeth J.; Gallo, Michael A.: Bioavailability of dioxin in soil from a 2,4,5-T manufacturing site. p497 25 Apr 1986.
- Urdal, David L. See Grabstein, Kenneth H.
- Vallis, Geoffrey K.: El Niño: a chaotic dynamical system? p243 11 Apr 1986.
- Van Allen, James A.: Myths and realities of space flight. p1075 30 May 1986.
- van Boom, Jacques H. See Quigley, Gary J.
- van de Rijn, Matthijs. See Spits, Hergen.
- van der Marel, Gijs A. See Quigley, Gary J.
- van der Meide, Peter. See Ferreira, Arturo.
- Van der Ploeg, Lex H. T. See Giannini, Suzanne Holmes.
- VanDeyender, J. Pace and Cook, Donald L.: Inertial confinement fusion with light ion beams. p831 16 May 1986.
- Van Grieken, Rene. See Andreac, Meinrat O.
- Van Rooijen, J. J. See Hynds, R. J.
- van Schooten, Wim. See Spits, Hergen.
- van Seventer, Gys. See Spits, Hergen.
- Van Valen, Leigh M. See Sloan, Robert E.
- Varmus, Harold E. See Coffin, John. See also Seeger, Christoph.
- Verbalis, Joseph G.; McCann, Monica J.; McHale, Colleen M.; Stricker, Edward M.: Oxytocin secretion in response to cholecystokinin and food: differentiation of nausea from satiety. p1417 13 June 1986.
- Vetter, Betty M. and Babco, Eleanor L.: Women's participation in the professional work force levels off—minority representation at near standstill (AAAS). p661 2 May 1986.

- Vietmeyer, Noel D.: Lesser-known plants of potential use in agriculture and forestry. p1379 13 June 1986.
- Villemain, Françoise. *See* Chatenoud, Lucienne.
- Vlassara, H. *See* Brownlee, M.
- Voellmy, Richard. *See* Ananthan, Jayakumar.
- Vogel, J. S. *See* Nelson, D. E.
- Vogt, Peter. *See* Coffin, John.
- von Noorden, Gunter K. *See* Harwerth, Ronald S.
- von Rosenvinge, Tycho T.; Brandt, John C.; Farquhar, Robert W.: The International Cometary Explorer mission to comet Giacobini-Zinner. p353 18 Apr 1986.
- Vrijenhoek, Robert C.: review of *Ecology and Genetics of Host-Parasite Interactions*, edited by D. Rollinson and R. M. Anderson. p112 4 Apr 1986.
- W**
- Wade, Margaret H.; Trosko, James E.; Schindler, Melvin: A fluorescence photobleaching assay of gap junction-mediated communication between human cells. p525 25 Apr 1986.
- Wagner, Denisa D. *See* Fay, Philip J.
- Wagner, Henry N., Jr. *See* Wong, Dean F.
- Wagner, John A.; Reynolds, Ian J.; Weisman, Harlan F.; Dudeck, Pamela; Weisfeldt, Myron L.; Snyder, Solomon H.: Calcium antagonist receptors in cardiomyopathic hamster: selective increases in heart, muscle, brain. p515 23 Apr 1986.
- Waldmann, Thomas A.: The structure, function, and expression of interleukin-2 receptors on normal and malignant lymphocytes. p727 9 May 1986.
- Waldrop, M. Mitchell (news): After Challenger: painful choices. p1335 13 June 1986. Congressmen urge support for supercollider. p571 2 May 1986. The connection machine goes commercial. p1090 30 May 1986. A cosmic string in Leo? p936 23 May 1986. The currents of space. p26 4 Apr 1986. NASA unveils space station concept. p1089 30 May 1986. Resolving the Star Wars software dilemma. p710 9 May 1986. Snarls from the cosmic string in Leo. p1601 27 June 1986. A solution to the solar neutrino puzzle? p578 2 May 1986. Space commission sets goals for 21st century. p1339 13 June 1986. Space Science Board endorses conventional rockets for science mission. p1191 6 June 1986. Third disaster in a row for NASA. p822 16 May 1986. White House group recommends a new shuttle orbiter. p706 9 May 1986.
- Walker, Cyril A. *See* Charig, Alan J.
- Wallace, Robert E.: review of *Geologists and Ideas*, edited by Ellen T. Drake and William M. Jordan. p1278 6 June 1986.
- Walsh, E. J. *See* Beal, R. C.
- Walsh, John (news): Bloch prepares NSF for lean years. p440 25 Apr 1986. NSF designates five new engineering centers. p18 4 Apr 1986. NSF to establish computer directorate. p18 4 Apr 1986. Oil industry R&D takes a fall. p1593 27 June 1986. Panel sees decline in undergraduate education. p153 11 Apr 1986. A project born of hope, desperation. p1081 30 May 1986. River blindness: a gamble pays off. p922 23 May 1986. *Simulium damnosum*. p923 23 May 1986. U.S.-China exchanges accentuate sciences. p1597 27 June 1986. A winning combination. p924 23 May 1986.
- Walt, Stephen M.: review of *Psychology and Deterrence*, by Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, with Patrick M. Morgan and Jack L. Snyder. p1014 23 May 1986.
- Wang, Andrew H.-J. *See* Quigley, Gary J.
- Wano, Yuji. *See* Greene; Warner C.
- Warburton, Peter W. *See* Giannini, Suzanne Holmes.
- Ward, Honorine. *See* Lev, Boaz.
- Ward, Timothy J. *See* Armstrong, Daniel W.
- Wasserman, E.: Methylene: experiment and theory (letter). p1319 13 June 1986.
- Wasserman, Steven A. and Cozzarelli, Nicholas R.: Biochemical topology: applications to DNA recombination and replication. p951 23 May 1986.
- Wasson, John T. *See* Kyte, Frank T.
- Watson, Dennis K. *See* Rovigatti, Ugo.
- Waxman, Lloyd and Goldberg, Alfred L.: Selectivity of intracellular proteolysis: protein substrates activate the ATP-dependent protease (La). p500 25 Apr 1986.
- Wayne, C. Eugene: review of *Regular and Chaotic Motions in Dynamic Systems*, edited by G. Velo and A. S. Wightman. p1153 30 May 1986.
- Weaver, Harold A. *See* Mumma, Michael J.
- Webb, R. Clinton. *See* Berk, Bradford C.
- Weetall, Howard H. and Pitcher, Wayne H., Jr.: Scaling up an immobilized enzyme system. p1396 13 June 1986.
- Wehrenberg, William B. and Ehlers, Cindy L.: Effects of growth hormone-releasing factor in the brain (technical comment). p1271 6 June 1986.
- Weil-Malherbe, Hans: Hic, haec, hoc . . . (letter). p811 16 May 1986.
- Weinberg, Alvin M.: Are breeder reactors still necessary? p695 9 May 1986.
- Weisfeldt, Myron L. *See* Wagner, John A.
- Weisman, Harlan F. *See* Wagner, John A.
- Weiss, Robin. *See* Coffin, John.
- Weiss, Susan R. *See* Suzumura, Akio.
- Weissman, Irving I. *See* Gershengeld, Howard K.
- Wells, F. V. *See* Denniston, K. J.
- Welsh, Michael J.: An apical-membrane chloride channel in human tracheal epithelium. p1648 27 June 1986.
- Welte, Karl. *See* Souza, Lawrence M.
- Wenzel, K.-P. V. *See* Hynds, R. J.
- Wetherald, R. T. *See* Manabe, S.
- Whitcomb, Robert F. *See* Hackett, Kevin J.
- White, Bradley N. *See* McDermid, Heather E.
- White, Janice L. *See* Roberts, Michael M.
- White, William B.: review of *Karsl Geomorphology*, by J. N. Jennings. p1034 23 May 1986.
- Whybrow, Peter J. *See* Charig, Alan J.
- Wildavsky, Aaron: Denning risk (letter). p439 25 Apr 1986.
- Wiley, D. C. *See* Durbin, R. M.
- Wilkinson, David T.: Anisotropy of the cosmic blackbody radiation. p1517 20 June 1986.
- Wilkinson-Singley, Elizabeth. *See* Überbacher, Edward C.
- Williams, Jeanne. *See* Pozzatti, Rudy.
- Williams, Michael. *See* Mumma, Michael J.
- Williams, Paul H. and Hill, Curtis B.: Rapid-cycling populations of *Brassica*. p1385 13 June 1986.
- Williams, Peter J. LeB. *See* Ducklow, Hugh W.
- Williams, Roger. *See* McPherson, Alexander.
- Williamson, David L. *See* Hackett, Kevin J.
- Williamson, Richard L., Jr.: review of *The Nuclear Suppliers and Nonproliferation*, edited by Rodney W. Jones, Cesare Merlini, Joseph F. Pilat, and William C. Potter, and *The Nuclear Connection*, edited by Alvin Weinberg, Marcelo Alonso, and Jack N. Barkenbus. p663 2 May 1986.
- Wilson, David B.: review of *Faraday Rediscovered*, edited by David Gooding and Frank A. J. L. James. p1039 23 May 1986.
- Wilson, T. R. S.; Thomson, J.; Hydes, D. J.; Colley, S.; Calkin, R.; Sorenson, J.: Oxidation fronts in pelagic sediments: diagenetic formation of metal-rich layers. p972 23 May 1986.
- Winkler, Allan M.: review of *By the Bomb's Early Light*, by Paul Boyer. p407 18 Apr 1986.
- Winkler, Marjorie E. *See* Schreiber, Alain B.
- Wise, David. *See* Blumenthal, David.
- Witten, T. A. and Cates, M. E.: Tenuous structure from disorderly growth processes. p1607 27 June 1986.
- Wolozin, Benjamin L.; Pruchnicki, Alex; Dickson, Dennis W.; Davies, Peter: A neuronal antigen in the brains of Alzheimer patients. p648 2 May 1986.
- Wong, Dean F.; Wagner, Henry N., Jr.; Dannals, Robert F.; Links, Jonathan M.; Kuhar, Michael J.; Gjedde, Albert: Human brain receptor distribution (technical comment). p1269 6 June 1986.
- Wong-Staal, Flossie. *See* Hahn, Beatrice H.
- Wood, C. *See* Martin, R. L.
- Wood, S. P.; Tickle, I. J.; Treharne, A. M.; Pitts, J. E.; Mascarenhas, Y.; Li, J. Y.; Husain, J.; Cooper, S.; Blundell, T. L.; Hruby, V. J.; Buku, A.; Fischman, A. J.; Wyssbrod, H. R.: Crystal structure analysis of deamino-oxytocin: conformational flexibility and receptor binding. p633 2 May 1986.
- Wood, William I. *See* Gitschier, Jane.
- Wormald, Patricia J. *See* Millar, Robert P.
- Wrather, Joan: Annual meeting returns to Philadelphia (AAAS). p660 2 May 1986.
- Wright, Thomas L.: review of *Mount Etna*, by D. K. Chester, A. M. Duncan, J. E. Guest, and C. R. J. Kilburn. p1033 23 May 1986.
- Wright, Winthrop R.: review of *Sweetness and Power*, by Sidney W. Mintz. p111 4 Apr 1986.
- Wynn, Paul: Issue number: advantage of absence (letter). p1587 27 June 1986.
- Wynn-Williams, Gareth: review of *Protostars and Planets II*, edited by David C. Black and Mildred Shapley Matthews. p1037 23 May 1986.
- Wyssbrod, H. R. *See* Wood, S. P.

X-Z

- Xu, J. A.; Mao, H. K.; Bell, P. M.: High-pressure ruby and diamond fluorescence: observations at 0.21 to 0.55 terapascal. p1404 13 June 1986.
- Yager, David D. and Hoy, Ronald R.: Of neologisms and oxymorons (letter). p810 16 May 1986.
- Yamamoto, Ken-ichi; Shiroo, Masahiro; Migita, Shunsuke: Diverse gene expression for isotypes of murine serum amyloid A protein during acute phase reaction. p227 11 Apr 1986.
- Yamamoto, Tadashi. *See* Akiyama, Tetsu.
- Yamamoto, Tokuo; Bishop, Richard W.; Brown, Michael S.; Goldstein, Joseph L.; Russell, David W.: Deletion in cysteine-rich region of LDL receptor impedes transport to cell surface in WHHL rabbit. p1230 6 June 1986.
- Yazu, Shuji. *See* Onodera, Akifumi.
- Young, A. B. *See* Frey, K. A.
- Young, D. T. *See* Bame, S. J.
- Yunis, Jorge J. *See* Rovigatti, Ugo.
- Zambresky, L. F. *See* Beal, R. C.
- Zamir, Nadav. *See* Eskay, Robert.
- Zecevic, Nada. *See* Rakic, Pasko.
- Zompetta, Claudia. *See* Faggioni, Alberto.
- Zsobo, Krisztina M. *See* Souza, Lawrence M.
- Zuckerman, Ben: review of *The Search for Extraterrestrial Life*, edited by Michael D. Papagiannis. p1035 23 May 1986.
- Zukowska-Grojec, Zofia. *See* Eskay, Robert.
- Zurawski, Gerard; Benedik, Michael; Kamb, Barkley J.; Abrams, John S.; Zurawski, Sandra M.; Lee, Frank D.: Activation of mouse T-helper cells induces abundant preproenkephalin mRNA synthesis. p772 9 May 1986.
- Zurawski, Sandra M. *See* Zurawski, Gerard.
- Zwickl, R. D. *See* Bame, S. J.

Information for Contributors

THE EDITORS OF SCIENCE

Manuscripts should be addressed to the Editor, *Science*, 1333 H Street, NW, Washington, DC 20005. Submit three copies together with a letter of transmittal giving

- 1) the names and telephone numbers of the authors;
- 2) the title of the paper and a statement of its main point;
- 3) three to eight keywords to be used for indexing;
- 4) the names, addresses, telephone numbers, and fields of interest of four to six persons outside your institution who are qualified to referee the paper;
- 5) the names of colleagues who have reviewed the paper;
- 6) the total number of words (including text, references, and figure and table legends) in the manuscript; and
- 7) a statement that the material has not been published and is not under consideration for publication elsewhere.

In addition, include with your manuscript (i) any paper of yours that is in press or under consideration elsewhere and includes information that would be helpful in evaluating the work submitted to *Science*; (ii) written permission from any author whose work is cited as a personal communication, unpublished work, or work in press but is not an author of your manuscript; and (iii) for review of manuscripts based on crystallographic data, two copies of the coordinates. (It is expected that, if the manuscript is accepted, coordinates will be offered for deposit to the appropriate crystallographic data bank.)

Before being reviewed in depth, most papers are rated for their interest and overall suitability by a member of the Board of Reviewing Editors. When papers are submitted in disciplines for which there is no appropriate member of the Board of Reviewing Editors, the initial screening is done by editorial staff members in consultation with outside experts in those areas. Papers that are not in the highest rating category are returned to the authors within about 2 weeks; the title page and abstract from one copy are retained for our files. The others are reviewed in depth by two or more

outside referees. Authors are then notified of acceptance, rejection, or need for revision within 6 to 10 weeks from the date of receipt. As stated in the editorial of 18 January 1985 (*Science*, volume 227, page 249), there can be no resubmissions, either of papers returned after initial screening or of papers returned after in-depth review.

Conditions of Acceptance

When a paper is accepted for publication in *Science*, it is understood by the editors (i) that any materials necessary to verify the conclusions of the experiments reported will be made available to other investigators under appropriate conditions; (ii) that all authors have seen and approved the final version of the manuscript; and (iii) that a paper accepted by *Science* will not be released to the press or the public before its publication. If there is a need in exceptional cases to publicize research findings in advance of publication, the AAAS Office of Communications (202-326-6440) must be consulted.

Selection of Manuscripts

In selecting papers for publication, the editors give preference to those of general significance that are well written, well organized, and intelligible to scientists in different disciplines. An attempt is made to balance the subject matter in all sections of *Science*. Membership in the AAAS is not a factor in selection.

Papers accepted for publication are edited to improve the accuracy and effectiveness of communication and to bring them within the specified length limits. When the author's meaning is not clear, the editor may consult the author by telephone; when editing is extensive, the manuscript may be returned to the author for approval and retyping before the type is set.

Six categories of signed papers are published: general articles, research articles, reports, letters, technical comments, and book reviews.

General Articles. General articles (up to 5000 words) are expected to (i) review new developments in one field that will be of interest to readers in other fields; (ii) describe a current research problem or a technique of interdisciplinary significance; or (iii) discuss some aspect of the history, logic, philosophy, or administration of science and public affairs. Readers should be able to learn from a general article what has been firmly established and what are unresolved questions; speculation should be kept to a minimum.

Many of the general articles are solicited by the editor. Both solicited and unsolicited articles undergo review.

General articles should include a note giving the authors' names, titles, and addresses; a summary (50 to 100 words); an introduction that outlines for the general reader the main point of the article; and brief subheadings to indicate the main ideas. The reference list should not be exhaustive; a maximum of 40 references is suggested. Figures and tables should occupy no more than one printed page.

Research Articles. A research article (up to 4000 words) is expected to contain new data representing a major breakthrough in its field. The article should include an author note, abstract, introduction, and sections with brief sideheads. There should be a short introduction outlining for the general reader the main point of the paper, a description of the experiments and the results, and then a discussion or conclusion. A maximum of 30 references is suggested. Figures and tables together should occupy no more than one printed page.

Reports. Reports are expected to contain important research results or reliable theoretical calculations whose essence can be expressed briefly. Preference is given to reports of discoveries that will be of broad interdisciplinary interest or of unusual interest to the individual discipline. Reports should include an abstract (no more than 100 words) and an introductory paragraph. The total number of words, including the references and notes and figure and table legends, should not exceed 2000. A maximum of 20 references is suggested. Figures and tables together should occupy no more than half a printed page.

Letters. Letters are selected for their pertinence to material published in *Science* or because they discuss problems of general interest to scientists. Letters pertaining to material published in *Science* may correct errors; provide support or agreement; or offer different points of view, clarifications, or additional information. Personal remarks about another author are inappropriate. Letters may be reviewed by outside consul-

tants. Letters selected for publication are intended to reflect the range of opinions received. The author of the *Science* paper in question is usually given an opportunity to reply.

All letters are acknowledged by postcard; authors are duly notified as to whether their letters are to be published. Preference is given to letters that do not exceed 250 words. Letters accepted for publication are frequently edited and shortened in consultation with the author.

Technical Comments. Technical comments (up to 500 words) may criticize articles or reports published in *Science* within the previous 6 months or may offer useful additional information. Discussions of minor issues or priority claims are not appropriate, nor are questions that can be resolved by private correspondence. The authors of the original paper are usually asked for an opinion of the comments and are given an opportunity to reply in the same issue if the comments are accepted. The comments, and sometimes the reply, are subject to the usual review procedures.

Book Reviews. The selection of books to be reviewed and of reviewers is made by the editors. Instructions and length specifications accompany the books when they are sent to reviewers.

Manuscript Preparation

Typing. Use double-spacing throughout the text, tables, figure legends, and references and notes and leave margins of at least 2.5 centimeters. Put your name on each page and number the pages starting with the title page.

Titles. Titles should be short, specific, and amenable to indexing. For general articles the maximum length is 52 characters and spaces; for research articles and reports the maximum is 108 characters.

Summaries or abstracts. These should include a sentence or two explaining to the general reader why the research was undertaken and why the results should be viewed as important. The abstract should convey the main point of the paper and outline the results or conclusions. Use of the first person, singular or plural, should be avoided.

Text. A brief introduction should portray the broad significance of the paper. The

whole text should be intelligible to readers in different disciplines. Technical terms should be defined. All tables and figures should be cited in the text in numerical order.

Units of measure. Use metric units. If measurements were made in English units, give metric equivalents.

Symbols and abbreviations. Define all symbols, abbreviations, and acronyms.

References and notes. Number references and notes in the order in which they are cited, first through the text and then through the table and figure legends. Use conventional abbreviations for well-known journals; provide complete titles for other journals. For references with up to five authors provide all the names; for more than five, provide the name of the first author only. Some examples follow:

1. A. B. Brown, C. K. Black, M. Matthews, R. Strong, I. Ebbitt, *Proc. Natl. Acad. Sci. U.S.A.* **72**, 512 (1970).
2. P. Curtis et al., in *Clinical Neurology of Development*, B. Walters, Ed. (Oxford Univ. Press, New York, 1983), pp. 60–73.
3. S. E. Wisdom, *Multicomponent Models of Ancient Skies* (NIE 79-1 Technical Report, University of Kansas, Lawrence, 1979).
4. B. Quick, *Man's Environment* (Macmillan, New York, 1932).
5. A. Able and P. Stark, *Geol. Soc. Am. Abstr. Programs* (1981), p. 215.
6. J. English, thesis, State University of New York, Stony Brook (1980).

Acknowledgments. Gather all acknowledgments into a brief statement at the end of the references and notes.

Informed consent. Investigations on human subjects must include a statement indicating that informed consent was obtained after the nature and possible consequences of the studies had been fully explained.

Figures. For each figure submit three high-quality glossy prints or original drawings of sufficient size to permit relettering but not larger than 22 by 28 centimeters (8½ by 11 inches). On the back of every figure write the first author's name and the figure number and indicate the correct orientation. *Manuscripts with oversized figures will be returned to the author without review.* Photocopies of figures are not acceptable; transparencies, slides, or negatives cannot be used since they cannot be sent to reviewers.

On acceptance of a paper, authors requesting the use of color will be asked to

supply slides or negatives of the color artwork and to pay \$600 for the first color figure and \$300 for each additional figure as a contribution toward printing costs.

Illustrations reprinted from other publications must be credited. It is the author's responsibility to obtain permission to reprint such illustrations in *Science*.

Tables. Tables should supplement, not duplicate, the text. They should be numbered consecutively with respect to their citation in the text. Each table should be typed, with its legend (double-spaced), on a separate sheet. Give each column a heading with units of measure indicated in parentheses. Do not change the unit of measure within a column.

Equations and formulas. Use quadruple-spacing around equations and formulas that are to be set off from the text. Define all symbols.

Statistical presentations. Report the uncertainty associated with results, including the specific measure of uncertainty used and the sources of error in it. Probabilities from statistical tests of significance should be subordinated to the reporting of results and associated uncertainties. Limitations to the generalizability of the results should be explicitly stated.

Printing and Publication

Proofs and reprints. One set of galley proofs is sent to the authors. An order blank for reprints accompanies the proofs.

Scheduling. Papers are scheduled for publication after *Science* has received corrected galley proofs from the authors. There may be delays for papers with tables or figures that present problems in layout, for papers with color figures, for papers accompanied by cover pictures, and for papers that exceed the length limits.

Cover Photographs

Particularly good photographs that pertain to a paper being submitted will be considered for use on the cover. Submit prints (not slides, negatives, or transparencies) with the manuscript and indicate in the letter of transmittal that a possible cover picture is enclosed.